No. 3786

United States Circuit Court of Appeals

for the Ninth Circuit

JOHN E. GILCHRIST,
Appellant,

vs.

F. B. MALLORY COMPANY,
a Corporation,
Appellee.

VOLUME NO. 1

(Containing All of Record Except Exhibits)

Transcript of Record

Upon Appeal from the United States District Court
for the District of Oregon

No. .

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for the District of Oregon

CHARLES E. TOWNSEND,
Crocker Building, San Francisco,
California, and

GRIFFITH, LEITER & ALLEN,
Electric Building, Portland, Ore.,
For the Appellants

LOYAL H. McCARTHY,
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Portland, Ore.,
For the Appellee

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In the District Court of the United States

FOR THE DISTRICT OF OREGON.

March Term, 1919.

BE IT REMEMBERED, That on the 29th day of May, 1919, there was duly filed in the District Court of the United States for the District of Oregon, the following

BILL OF COMPLAINT

To the Honorable, the Judges of the District Court of the United States in and for the District of Oregon:

John E. Gilchrist, a citizen of the United States, residing at South Bend, in the County of Pacific and State of Washington, brings this his Bill of Complaint against F. B. Mallory Company, a corporation, having its principal place of business at Portland, in the County of Multnomah, and State of Oregon, and a resident thereof.

And thereupon your orator complains and says:

I.

That he, the said John E. Gilchrist, before and at the time of the applications for letters patent hereinafter mentioned, was a citizen of the United

States, and was the true, original, and first inventor of certain new and useful Improvements in Pulley Blocks described therein, not known or used by others in the United States before his invention or discovery thereof, and not patented or described in any printed publication in the United States or any foreign country before his invention or discovery thereof, nor more than two years prior to his hereinafter referred to applications for Letters Patent therefor, and not in public use or on sale in the United States for more than two years prior to his said applications for Letters Patent therefor; nor first patented or caused to be patented by him or his legal representatives or assigns, in any country foreign to the United States on an application filed therefor prior to the filing of his said applications for Letters Patent of the United States.

II.

And your orator further shows unto your Honors, that he, the said John E. Gilchrist, so being a citizen of the United States and as your orator is informed and believes and avers, the inventor of said Improvements in Pulley Blocks, made in writing two several applications for Letters Patent therefor, to the Commissioner of Patents of the United States, in accordance with the then existing Acts of Congress, and having duly complied, in all respects, with the conditions and requirements of said Acts, such proceedings were had that, on the sixth day of December, 1910, Letters Patent of the United States No.

977,613, and on the third day of June, 1913, Letters Patent of the United States No. 1,063,528, both in due form of law, for said inventions, were issued under the seal of the Patent Office of the United States, signed by the Secretary of the Interior, or under his direction, and countersigned by the Commissioner of Patents, and delivered to the aforesaid John E. Gilchrist, whereby there was secured to him and to his heirs, assigns, or other legal representatives, for the term of seventeen years from and after the 6th day of December, 1910, and from and after the 3d day of June, 1913, respectively, the full and exclusive right of making, using and vending to others to use, said inventions or discoveries throughout the United States and the Territories thereof, as by said Letters Patent, or duly certified copies thereof, ready in Court to be produced, will more fully and at large appear.

III.

Your orator further shows that the respective subject matters of, and inventions described and claimed in, said several Letters Patent, to wit, No. 977,613 and No. 1,063,528, are adapted for, and are susceptible of conjoint use, and that they are so used.

IV.

And your orator further shows unto your Honors that by virtue of the premises he became, and now is, the sole and exclusive owner of said letters patent, and the inventions and improvements described

therein, and of all the rights and privileges granted and secured thereby. And that since he became the owner thereof, as aforesaid, he has invested and expended large sums of money, and he has been to great trouble in and about said inventions, for the purpose of carrying on the business of manufacturing and selling Pulley Blocks containing the said inventions, and making the same profitable to himself and useful to the public; and that said inventions have been and are of great benefit and advantage; and that a large number of such pulley blocks were made according to said inventions, and sold by your orator to great advantage to the public; and your orator believes he will realize and receive large gains and profits therefrom if infringements by said defendant and his confederate shall be prevented.

V.

Yet the defendant, well knowing the premises and the rights secured to your orator, as aforesaid, but contriving to injure your orator, and deprive him of the benefits and advantages which might and otherwise would accrue unto him from said inventions, after the issuing of said letters patent, as aforesaid, and before the commencement of this suit, did, as your orator is informed and believes, and therefore alleges, without the license or allowance, and against the will of your orator, and in violation of his rights, and in infringements of the aforesaid Letters Patent, at Portland, in the County of Multnomah and

State of Oregon, within the jurisdiction of this Honorable Court, and elsewhere in the said District, unlawfully and wrongfully, and in defiance of the rights of your orator, make, construct, use and vend to others to be used, the said inventions, and did make, construct, use and vend to others to be used Pulley Blocks made according to, and employing and containing said inventions, and that it still continues so to do; and that it is threatening to make the aforesaid Pulley Blocks in large quantities, and to supply the market therewith, and to sell the same.

All in defiance of the rights acquired and secured to your orator as aforesaid, and to his great and irreparable loss and injury, and by which he has been and still is being deprived of great gains and profits, which he might and otherwise would have obtained, and which have been received and enjoyed, and are being received and enjoyed, by the said defendant through its aforesaid wrongful acts and doings, and that your orator has been occasioned large damages because of such wrongful acts of the defendant.

VI.

And your orator further shows unto your Honors, on information and belief, that the said defendant has sold large quantities of said Pulley Blocks, and has a large quantity on hand, which it is offering for sale, and has made and realized large profits and advantages therefrom; but to what extent, and how much exactly, your orator does not know, and prays

a discovery thereof. And your orator says that the use of said inventions by said defendant, and his preparation for and avowed determination to continue the same, and his other aforesaid unlawful acts, in disregard and defiance of the rights of your orator, have the effect to and do encourage and induce others to venture to infringe said patents in disregard of your orator's rights.

VII.

And your orator further shows unto your Honors that he has caused notice to be given to said defendant of said infringements, and of the rights of your orator in the premises, and requested it to desist and refrain therefrom; but it disregarded said notices, and refused to desist from said infringements, and still continues to make and sell patented Pulley Blocks.

VIII.

And your orator states on information and belief to this Honorable Court that the Pulley Blocks made, used and vended to others to be used by the said defendant are in all material respects the same as those described in said letters patent No. 977,613, and are an infringement of claims one (1), four (4) and five (5) thereof; and are in all material respects the same as those described in said letters patent No. 1,063,528 and are an infringement of claims one (1) and two (2) thereof.

IX.

And your orator prays your Honors to grant your orator a preliminary, and also a perpetual, writ of injunction, issuing out of and under the seal of this Honorable Court, directed against the said F. B. Mallory Company, and strictly enjoining it and its officers, directors, agents and employees not to make, use, or vend to others to be used the said improved Pulley Blocks covered and secured by said Letters Patent, or either of them.

And your orator further prays that the said defendant by the decree of this Court, may be compelled to account and pay over to your orator all profits which said defendant has derived, or shall have derived from the construction, or sale, or use in any manner of said patented pulley blocks, or any part thereof, obtained, claimed and secured to your orator by said Letters Patent, or either of them; and also, that your Honors, upon the entering of the decree for infringement, as above prayed for, may proceed to assess, or cause to be assessed under your direction, in addition to the profits to be accounted for by the defendant as aforesaid, the damages your orator has sustained by reason of such infringement, and that your Honors may increase the actual damages so assessed to a sum equal to three times the amount of such assessment, under the circumstances of the wilful and unjust infringement by said defendant, as herein set forth; and that the defendant be decreed also to pay the costs of this suit, and

that your orator may have such other and further relief as the equity of the case may require, and to this Court may seem just.

To the end therefore that the defendant may, if it can, show why your orator should not have the relief prayed, and may full, true, direct and perfect answer make to all the premises, and to all the several matters hereinbefore stated and charged, as fully and particularly as if separately interrogated as to each and every of said matters, and may be compelled to account for and pay over to your orator the profits by it acquired, and the damages suffered by your orator from the aforesaid acts.

May it please your Honors to grant unto your orator the writ of Subpoena ad Respondendum issuing out of and under the seal of this Honorable Court, directed to said defendant, commanding it to appear and make answer to this Bill of Complaint and to conform and abide by such order and decree herein as to this Court may seem meet.

And your orator will ever pray.

JOHN E. GILCHRIST, (Sgd.)

JAS. H. CARY,
Solicitor.

GRIFFITH, LEITER & ALLEN,
Of Counsel.

State of Oregon,
County of Multnomah. } ss.

On this 15th day of May, 1919, before me personally appeared John E. Gilchrist, and made oath that he is the complainant herein, that he has read the foregoing bill subscribed by him, and knows the contents thereof and that the same is true of his own knowledge, except as to matters which are therein stated to be based on information and belief and as to those matters he believes it to be true.

W. L. Foley (Sgd.),
Notary Public for Oregon.

My commission expires July 24, 1919.
(Notarial Seal.)

And afterwards, on the 25th day of May, 1920, there was filed in said Court the following

AMENDED ANSWER

To the Honorable Judges of the United States District Court for the District of Oregon:

Now comes the above named defendant and for an amended answer to the bill of complaint filed by the complainant herein, admits, denies and alleges as follows:

I.

Admits that the said John E. Gilchrist is a citizen of the United States and was such citizen at all times mentioned in the bill of complaint;

Denies that he is the first, or true, or original in-

ventor of any new or useful improvements referred to in paragraph numbered "I" or claimed in United States Letters Patent No. 977,613 or United States Letters Patent No. 1,063,528;

Denies that the improvements claimed by said letters patent were not known and used by others in the United States for more than two years prior to complainant's application for either of said letters patent;

Denies that the same was not described in any printed publication for more than two years prior to complainant's application for either of said letters patent;

Denies that the same was not in public use and on sale in the United States for more than two years prior to complainant's application for Letters Patent as to each and both of said Letters Patent;

Denies that the said alleged improvements were not patented for more than two years prior to complainant's application for Letters Patent.

II.

As to paragraph numbered "II" admits that complainant made two applications to the Commissioner of Patents of the United States for Letters Patent upon what were therein claimed to be improvements in pulley blocks and that thereafter on December 6th, 1910, Letters Patent No. 977,613 were issued to him and that thereafter on June 3d, 1913, Letters Patent No. 1,063,528 were issued to him; but denies

that the said John E. Gilchrist is the inventor of said alleged improvements;

Denies that the said John E. Gilchrist complied with the conditions and requirements of the then existing Acts of Congress, and denies that due proceedings were had upon said applications;

Denies that said Letters Patent secured to the complainant any exclusive right to make, or use, or vend any article or improvement of any nature whatsoever.

III.

As to paragraph numbered "III," denies that the alleged improvements claimed by Letters Patent No. 977,613 and No. 1,063,528 have any adaptability or susceptibility for conjoint use.

IV.

As to paragraph numbered "IV," denies that complainant is the sole or exclusive owner of the inventions or improvements claimed or described in either of said Letters Patent;

Denies that any rights or privileges of any nature whatsoever are secured to him by either of said Letters Patent;

As to all other allegations in said paragraph contained, defendant denies that he has any knowledge or information thereof sufficient to form a belief and upon the ground denies the same.

V.

As to paragraph numbered "V," denies that defendant contrived to injure the complainant or to deprive him of any advantages or benefits secured to him by said letters patent or otherwise;

Denies that he wrongfully or unlawfully or in defiance of the rights of complainant either made, used, constructed or sold any pulley blocks which in any way infringed any rights of the complainant secured to him either by said Letters Patent or otherwise;

Denies that he has threatened to do any act whatsoever in defiance of the rights of complainant;

Denies that complainant is being injured or deprived of any gains or profits by any wrongful act of the defendant, or that complainant suffered any damage by any wrongful act of defendant.

VI.

Admits that defendant has sold large quantities of pulley blocks and is still selling pulley blocks, but denies that any of the said pulley blocks so sold or to be sold infringe upon any right secured to the complainant;

Denies the defendant has used any invention or improvement secured to complainant and thereby encouraged or induced others to infringe upon complainant's rights.

VIII

As to paragraph numbered "VII," denies that complainant caused notice to be served upon or to

be given to this defendant of any claimed infringement until just prior to the commencement of this suit, and denies that complainant requested this defendant to desist from making or selling pulley blocks of any nature whatsoever until just prior to the commencement of this suit although complainant had known for years the exact styles and models of pulley blocks carried by defendant and had known for years that defendant was making and selling the very pulley blocks which complainant now claims to be an infringement upon his rights.

VIII.

Denies that defendant is making, using or vending pulley blocks which in any way infringe upon any rights secured by United States Letters Patent No. 977,613 or No. 1,063,528.

IX.

Denies that complainant has any right to an injunction or restraining order against this defendant as to any matter whatsoever.

* * * * * * * *

As a first further and separate answer and defense to complainant's bill of complaint defendant alleges:

I.

That all of the essential features, principles and elements of the alleged improvement or discovery of the said John E. Gilchrist and of either of his alleged improvements and discoveries were disclosed and described prior to the alleged discovery or invention of the said John E. Gilchrist, and more than

two years prior to his application for Letters Patent in publications and patents issued both in this country and in foreign countries, many of which are unknown to the defendant herein and which he asks leave to insert and refer to upon discovery thereof.

II.

That some of the patents and publications so disclosing and describing the alleged improvements and discoveries of the complainant are as follows: United States Letters Patent No. 8,950 issued to C. H. Platt, May 18th, 1852; United States Letters Patent No. 115,248 issued to Henry Smith, May 23d, 1871; United States Letters Patent No. 189,773 issued to J. W. Norcross, April 17th, 1877; United States Letters Patent No. 241,703, issued to J. W. Norcross, May 17th, 1881; United States Letters Patent No. 304,103 issued to J. B. F. Herreshoff, August 26th, 1884; United States Letters Patent No. 390,341 issued to A. E. Brown, October 2d, 1888; United States Letters Patent No. 492,550 issued to T. R. Ferrall, February 28th, 1893; United States Letters Patent No. 513,067 issued to J. R. Labadie, January 16th, 1894; United States Letters Patent No. 610,-172 issued to I. M. Dotson, September 6, 1898; United States Letters Patent No. 644,729 issued to W. W. Bouse, March 6th, 1900; United States Letters Patent No. 699,518 issued to E. B. Hammond, May 6, 1902; United States Letters Patent No. 760,378 issued to A. N. and C. B. Borquist, May 17, 1904; United States Letters Patent No. 760,944 issued to

G. Agobian May 24, 1904; United States Letters Patent No. 765,475 issued to J. E. Gilchrist, July 19, 1904; United States Letters Patent No. 769,998 issued to A. D. Foote September 13, 1904; United States Letters Patent No. 779,437, issued to G. Nettle, January 10, 1905; United States Letters Patent No. 780,280 issued to Herbert Gilley, January 17, 1905; United States Letters Patent No. 786,790 issued to G. W. King, H. J. Barnhart and C. B. King, April 4, 1905; United States Letters Patent No. 806,-562 issued to Andrew Opsal December 5, 1905; United States Letters Patent No. 823,231 issued to A. B. Tarbox, June 12, 1906; United States Letters Patent No. 844,159 issued to Enoch Ludford, February 12, 1907; United States Letters Patent No. 845,041 issued to Andrew Opsal, February 19, 1907; United States Letters Patent No. 847,955 issued to J. N. Lindsay, March 19, 1907; United States Letters Patent No. 869,422, issued to William H. Corbett, October 29, 1907; United States Letters Patent No. 876,-176 issued to Bennett W. Hammond, January 7, 1908; United States Letters Patent No. 880,805 issued to James Mattson, March 3, 1908; United States Letters Patent No. 898,121 issued to H. J. Littler, September 8, 1908; United States Letters Patent No. 942,274 issued to E. Martin, December 7, 1909; United States Letters Patent No. 964,284 issued to J. A. Lockfaw, July 12, 1910; United States Letters Patent No. 973,177 issued to S. J. and P. W. Davis and C. McCready, October 18, 1910; United States Letters Patent No. 984,141 issued to J. T. Johnson, February 14, 1911; British

Letters Patent No. 712-1893 issued to David John Morgan and William Guy Nixon, complete specifications accepted January 12, 1894; British Letters Patent No. 5657 issued to Jens Christian Wurtzen Kjelgaard, complete specifications accepted April 18, 1896; British Letters Patent No. 4127-1901 issued to Thomas Reed Dyne; advertisement of Pacific Iron Works published on page 46 of the January, 1906, issue of "The Timberman"; advertisement of Borquist Block on page 49 of same publication; advertisement of Vulcan Iron Works on page 59 of same publication; advertisement of Columbia Steel Company on page 18 of "The Timberman" in October, 1907, issue; advertisement of Vulcan Iron Works on page 45 of the December, 1907, issue of "The Timberman"; F. B. Mallory advertisement on page 25 of the January, 1908, issue of "The Timberman"; Columbia Steel Company advertisement on page 18 of the January, 1908, issue of "The Timberman"; Portland Tool Works advertisement on page 29 of the January, 1908, issue of "The Timberman"; Borquist Block advertisement, page 59 of the January, 1908, issue of "The Timberman"; Pacific Iron Works advertisement on page 88 of the January, 1908, issue of "The Timberman"; Columbia Steel Company advertisement, page 18 of the February, 1908, issue of "The Timberman"; Borquist advertisement, page 38 of the February, 1908, issue of "The Timberman"; Vulcan Iron Works, page 53 of the February, 1908, issue of "The Timberman"; Portland Iron Works, page 66 of the February,

1908, issue of "The Timberman"; Pacific Iron Works advertisement, page 78 of the February, 1908, issue of "The Timberman"; F. B. Mallory advertisement, back cover of February, 1908, issue of "The Timberman"; Columbia Steel Company advertisement, page 18 of the February, 1909, issue of "The Timberman"; F. B. Mallory advertisement, page 23 of the February, 1909, issue of "The Timberman"; Vulcan Iron Works advertisement, page 26 of the February, 1909, issue of "The Timberman"; Pacific Iron Works advertisement, page 74 of the February, 1909, issue of "The Timberman"; F. B. Mallory advertisement, page 43 of the February, 1911, issue of "The Timberman"; F. B. Mallory advertisement, page 18 of the June, 1912, issue of "The Timberman"; F. B. Mallory advertisement, page 20 of the July, 1912, issue of "The Timberman."

* * * * * * * *

And for a second further and separate answer and defense to the bill of complaint filed herein said defendant alleges:

I.

That the alleged and so-called inventions and improvements in Pulley Blocks described and embodied in the letters patent in said complaint referred to do not involve or contain any patentable novelty, invention or discovery, nor cover nor disclose any new art, machine, manufacture or composition of matter, nor any new or useful improvement there-

of, and the said alleged inventions involve and comprehend only obvious, well known and prior mechanical expedients or the adjustment of familiar devices and appliances.

And for a third further and separate answer and defense to said bill of complaint, defendant alleges:

I.

That defendant is informed and believes and therefore avers that neither the alleged improvements in pulley blocks which the patents mentioned in the complaint purport to cover, nor any of the elements or features thereof, were invented by the said John E. Gilchrist, but that the said alleged improvements and all the essential parts and features thereof were in common use by various persons and well known to the public generally for more than two years prior to the application for either of said patents by the said John E. Gilchrist, and for many years prior thereto and for many years prior to the alleged invention or discovery of any of the said alleged improvements by the said John E. Gilchrist.

II.

That all of the said alleged improvements in pulley blocks were used in the logging camps of the Pacific Northwest, and defendant is informed and believes and therefore avers that said alleged improvements were used in the logging camps in and around Grays Harbor, Washington, in the vicinity of complainant's residence and other Pacific North-

west logging camps, and that it was the use of such alleged improvements in the logging camps that prompted complainant to make application for Letters Patent and thereby attempt to appropriate to himself the control of the same.

III.

That defendant is informed and believes and therefore avers that all of the features, principles and elements of the alleged improvements or discoveries of the said John E. Gilchrist were manufactured and used by various persons unknown to defendant long prior to complainant's alleged invention or discovery thereof and were in public use and on sale in the United States for more than two years prior to his application for patent, and defendant asks the privilege of inserting the names of such persons upon discovery thereof, some of said persons being as follows: F. B. Mallory Company of Portland, Oregon, who has known, used, sold and had manufactured for it blocks embodying the said features beginning with the year 1902 and continuing to the present date, A. N. and C. B. Borquist of Portland, Oregon, who have known, used and manufactured and sold blocks embodying the said features since the year 1902, and prior to the year 1902, Polson Logging Company, a corporation of Hoquiam, Washington, who has manufactured and used blocks embodying said features since 1902; James J. Geary of Clatskanie, Oregon, who has known of and used blocks embodying all of said features since 1902.

* * * * * * * *

And for a fourth further and separate answer and defense to the bill of complaint filed herein defendant alleges:

I.

That each of the alleged improvements or inventions claimed by Letters Patent No. 977,613 and 1,063,528 describes and claims a mere aggregation of old principles which produce no new result, and said Letters Patent are void for want of novelty.

* * * * * * * * *

And for a fifth further and separate answer and defense to the bill of complaint filed herein defendant alleges:

I.

That defendant and other pulley block manufacturers have for many years and with the knowledge of the complainant been making, advertising and selling pulley blocks which complainant now claims are an infringement of his alleged patents without complainant making any objection thereto.

II.

That in the year 1914, defendant learned through a third person that the complainant had made the statement that he thought defendant was infringing upon his patents and that he was going to let the matter run along until it would make it worth while and he would then bring suit against defendant.

III.

That upon obtaining this information defendant immediately made an investigation for the purpose of finding out whether or not any of its pulleys were in any way infringing upon any of the rights of the complainant and went to the trouble and expense of furnishing Munn & Co., patent attorneys of Washington, D. C., and New York City, with blue prints of the line of pulley blocks manufactured by defendant and procured a search to be made by said attorneys for the purpose of determining whether or not the defendant was infringing upon the rights of any persons and especially the complainant, and and upon receiving an opinion from said attorneys, wrote to the complainant herein in November, 1914, stating what defendant had heard concerning complainant's claim that defendant was infringing upon his rights and also stating that defendant had procured a search and legal opinion as to its right to manufacture the line of pulley blocks it was making, stated further that defendant did not wish to infringe upon the rights of complainant and invited complainant to examine the opinion and copies of patents resulting from such search, the numbers, names and dates of which patents were furnished to plaintiff, and requested complainant to confer with defendant so as to avoid any controversy or trouble between them at a later date.

IV.

That complainant has at all times been in position to have conferred with defendant upon said matter and thereby arrive at a just understanding and agreement as to the rights of the respective parties to this suit, and has at all times been financially able to prosecute any proceeding for the protection of his alleged rights, but the complainant, knowing that defendant and other pulley block dealers were building up a demand for the line of pulleys which complainant now claims are an infringement upon his rights and for the express purpose of building up a large claim for damages and taking advantage of the efforts of defendant and others, made no demand and no attempt to enforce his alleged rights under said patents until the month of February, 1919, when he notified defendant that it was infringing upon complainant's patents and demanded that defendant discontinue the making and selling of the line of pulley blocks which said complainant now claims is an infringement of his patents, but which complainant has known for many years and as defendant believes and therefore avers complainant has known for more than six years were being so made and sold by this defendant and by others.

V.

That by reason of complainant not heretofore demanding that defendant and others should discontinue the making and selling of such pulley blocks, and by reason of his standing by and allowing de-

fendant and others to build up a demand for the line of blocks which complainant now claims are an infringement of his patents, and by reason of all of the other acts of the complainant in the premises, which have prompted a large number of pulley block manufacturers, including this defendant, to feel that the complainant was making no claim against them and would make no claim against them for any alleged infringement of his patents, the complainant has waived any rights which he might have had to claim an infringement and should now be estopped from claiming that defendant has infringed his patents and should be estopped from claiming any damages or asking for an accounting by reason of any infringement or alleged infringement of his patents.

Wherefore, defendant prays that the bill of complainant herein be dismissed, that defendant recover its costs incurred herein, and have such other relief as the Court may deem just and equitable.

LOYAL H. MCCARTHY (Sgd.),
Attorney and Solicitor for Defendant.

State of Oregon,
County of Multnomah. } ss.

On this 24th day of May, 1920, before me personally appeared M. A. Kelliher, who made oath that she is treasurer of the defendant company herein and is authorized to verify the foregoing amended answer on its behalf; that she has read the foregoing

amended answer and knows the contents thereof and that the same is true of her own knowledge, except as to matters which are therein stated to be based on information and belief and as to those matters she believes it to be true.

M. A. Kelliher (Sgd).

Subscribed and sworn to before me this 24th day of May, 1920.

Bonnie M. Sims (Sgd.),
(Notarial Seal) Notary Public for Oregon.

My commission expires February 2, 1921.

And afterwards, on the fourteenth day of February, 1921, there was filed in said Court the following

OPINION

Portland, Oregon, February 14, 1921, 10 a. m.

R. S. Bean, District Judge:

I have carefully examined and considered the record and elaborate briefs submitted by counsel, but the time at my disposal will not permit a discussion of the various questions argued, nor do I deem it necessary.

Under the proof the ultimate question for determination as far as complainant's patent 977,613 is concerned is whether the element of a pulley side cast in one piece and provided with an interior oil chamber is sufficient, in view of the prior art, to constitute invention and give validity to the patent. All other elements of the claims in question are old in the art, and in the Gilchrist pulley they do not per-

form any new function or have any new mode of operation, or produce any new result, and therefore the combination of them in one device is not invention.

> "The combination to be patentable must produce a different force or effect or result in the combined forces or processes, from that given by their separate parts. There must be a new result produced by their union; if not so, it is only an aggregation of separate elements."
>
> *Beckendorfer vs. Faber,* 92 U. S. 347.

See also

Hailes vs. Van Wormer, 20 Wall. 353.

Palmer vs. Corning, 156 U. S. 342.

Thatcher Heating Co. vs. Burtis, 121 U. S. 286.

Jackson Skirt & N. Co. vs. Rosenbaum, 225 Fed. 531.

Oil reservoirs in pulley sides are old in the art as shown by the Morgan, Ludbord and Labadie patents. Indeed the Morgan patent reads substantially letter perfect with claim 1 of complainant's patent. It is true the oil reservoir in the Morgan pulley is formed by a plate riveted on the side and not cast as an integral part of it as in complainant's device. It, however, is for the same purpose, operates and functions in the same way and produces the same result by retaining oil and lubricating the bearing pin as in complainant's patent, and it was not invention for complainant to make the side in one piece thus combining the separate parts of the Morgan patent,

since there is no substantial change in function, operation or result.

Ft. Pitt Supply Co. vs. Ireland & Mathews Mfg., 232 Fed. 871.

Enterprise Mfg. vs Shakespeare Co., 220 Fed. 304.

Crier vs. Innes, 160 Fed. 102.

Huebner-Toledo Breweries vs. Mathews Grav. Car. Co., 253 Fed. 435.

Machine Co. vs. Murphy, 97 U. S. 120.

R. R. Supply Co. vs. Elyria I. & S., 244 U. S. 285.

In reaching this conclusion, I am not unmindful of the presumption of the validity of the patent arising from its issue, or that the auto-lubricating block manufactured by plaintiff has proven its superior utility in the logging business.

> "But a mere carrying forward or new or more extended application of the original thought, a change only in form, proportions, or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with better results is not such invention as will sustain a patent."
>
> *Smith vs. Nichols,* 88 U. S. 119.

And

> "The advantages claimed for it (the Gilchrist device) and which it no doubt possesses to a considerable degree cannot be held to change this result, it being well settled that utility cannot control the language of the statute, which limits the benefit of the patent law to things which are new as well as useful. The fact that the patented article has gone into general use is evidence of its utility, but not con-

clusive of that, and still less of its patentable novelty.

Grant vs. Walters, 148 U. S. 556.

See also

McClain vs. Ortmayer, 141 U. S. 419.
Hollister vs. Benedict & Burnham Mfg., 143 U. S. 59.
Smith vs. Nichols, 21 Wall. 112.
Edwards vs. Dayton Mfg. Co., 257 Fed. 980.
Herzog vs. Keller Co., 234 Fed. 85.
Huebner Toledo Breweries vs. Mathews Gravity Carrier Co., supra.
Klein vs. Seattle, 77 Fed. 220.

The question whether a patent involves invention is one of fact for the Court, to be answered in the light of all the pertinent considerations including the prior art, and so viewing the complainant's patent I am of the opinion that it is invalid for want of invention.

The other patent in controversy calls for a guard used conjointly with complainant's prior patent, arranged between the pulley cheek plates and between the shackle and the sheave, and in my judgment is not infringed by defendant using a connecting member between the compression links or spanners of the prior Littler patent.

It follows that the complaint should be dismissed and it is so ordered.

And afterwards, on the seventeenth day of February, 1921, there was filed in said Court the following

JUDGMENT AND DECREE

This cause came on to be further heard at this term, and was argued by counsel; and thereupon, upon consideration thereof, it was ordered, adjudged and decreed as follows, viz.:

I.

That claims 1, 4 and 5 of United States Letters Patent No. 977,613, issued to John E. Gilchrist, December 6, 1910, are made up of elements old in the art, which perform no new function, disclose no new mode of operation and produce no new result and are invalid for lack of patentable novelty.

II.

That defendant's use of a guard manufactured in conformity to a design disclosed by United States Letters Patent No. 45,911, issued to F. B. Mallory June 9, 1914, and which consists in the use of a connecting member between the compression links or spanners described and claimed in United States Letters Patent No. 898,121, issued to H. J. Littler September 8, 1908, under which defendant also operates, does not infringe claims 1 and 2 of United States Letters Patent No. 1,063,528.

III.

That complainant's bill of complaint herein be dismissed and that F. B. Mallory Company do have

and recover of the complainant, John E. Gilchrist, its costs and disbursements incurred herein, hereinafter to be taxed.

Dated this 17th day of February, 1921.

R. S. Bean,
District Judge.

And afterwards, on the tenth day of August, 1921, there was filed in said Court the following

PETITION FOR ORDER ALLOWING APPEAL

To the Honorable Court Above Entitled:

The above-named complainant, John E. Gilchrist, conceiving himself aggrieved by the decree filed and entered on the 17th day of February, 1921, in the above entitled cause, does hereby appeal therefrom to the United States Circuit Court of Appeals, for the Ninth Judicial Circuit, for the reasons and upon the grounds specified in the Assignments of Error, which is filed herewith, and prays that this appeal may be allowed, that a citation issue as provided by law, and that a transcript of the record, proceedings, exhibits and papers, upon which said decree was made and entered as aforesaid, duly authenticated, may be sent to the Circuit Court of Appeals for the Ninth Circuit, sitting at San Francisco.

And your petitioner further prays that an order be made fixing the amount of security, if any, which the complainant, John E. Gilchrist, shall give and

furnish upon such appeal, and that upon giving such security all further proceedings in this Court be suspended and stayed until the determination of said appeal by said United States Circuit Court of Appeals for the Ninth Circuit.

Dated this 9th day of August, 1921.

GRIFFITH, LEITER & ALLEN,
Solicitors for Complainant.

Due, timely and legal service admitted by copy at Portland, Oregon, this 9th day of August, 1921.

LOYAL H. MCCARTHY,
Attorney for Defendant.

And afterwards, on the tenth day of August, 1921, there was filed in said Court the following

ORDER ALLOWING APPEAL

The petition of the complainant for an appeal is allowed; and upon the petitioner filing a bond in the sum of One Thousand ($1000.00) Dollars with sufficient sureties, to be conditioned as required by law, shall operate to suspend and stay all further proceedings in this Court, except the preparation and settlement of the record on appeal, until the determination of said appeal by the United States Circuit Court of Appeals for the Ninth Circuit.

Dated this 10th day of August, 1921.

R. S. BEAN, *Judge.*

Due, timely and legal service by copy admitted at Portland, Oregon, this 10th day of August, 1921.

LOYAL H. MCCARTHY,
Attorney for Defendant.

And afterwards, on the tenth day of August, 1921, there was filed in said Court the following:

ASSIGNMENT OF ERRORS

Now comes the complainant in the above entitled cause and files the following assignment of errors upon which he will rely upon his prosecution of the appeal in the above entitled cause, from the decree made by this Honorable Court on the 17th day of February, 1921:

I.

That the District Court of the United States for the District of Oregon erred in holding that Claims 1, 4 and 5 of United States Letters Patent No. 977,-613, issued to John E. Gilchrist, December 6, 1910, are respectively made up of elements old in the art which perform no new function, disclose no new mode of operation and produce no new result.

II.

That the District Court of the United States for the District of Oregon erred in holding that Claims 1, 4 and 5 of United States Letters Patent No. 977,-613, issued to John E. Gilchrist, December 6, 1910, are respectively invalid for lack of patentable novelty.

III.

That the District Court of the United States for the District of Oregon erred in holding that the novelty of Claims 1, 4 and 5, respectively, of said United

States Letters Patent No. 977,613, resides in any individual element rather than in a combination.

IV.

That the District Court of the United States for the District of Oregon erred in holding that Claims 1, 4 and 5 of said United States Letters Patent No. 977,613, respectively, involve merely an aggregation of old devices and that each of said claims fails to disclose a combination.

V.

That the District Court of the United States for the District of Oregon erred in holding that Claims 1, 4 and 5 of said United States Letters Patent No. 977,613, are each invalid for want of invention.

VI.

That the District Court of the United States for the District of Oregon erred in holding that the several elements described in Claims 1, 4 and 5 of United States Letters Patent No. 977,613, functioning in co-operation as a logging block of superior utility, do not, as to each claim, produce any new result.

VII.

That the District Court of the United States for the District of Oregon erred in holding that defendant's manufacture and use of a line guard, as disclosed by the evidence, did not infringe Claims 1 and 2 of United States Letters Patent No. 1,063,528.

VIII.

That the District Court of the United States for the District of Oregon erred in holding that the manufacture and use by the defendant of a line guard consisting of the addition of a connecting member between the compression links or spanners described and claimed in United States Letters Patent No. 898,121, issued to H. J. Littler September 8, 1908, does not infringe Claims 1 and 2 of United States Letters Patent No. 1,063,528.

IX.

That the District Court of the United States for the District of Oregon erred in dismissing the complaint herein and rendering judgment for costs in favor of the defendant.

Wherefore, the complainant prays that said decree be reversed and that said District Court for the District of Oregon be ordered to enter a decree reversing the decision of the lower court in said cause.

GRIFFITH, LEITER & ALLEN,
Attorneys for Complainant.

Due, timely and legal service by copy admitted at Portland, Oregon, this 9th day of August, 1921.

LOYAL H. MCCARTHY,
Attorney for Defendant.

And afterwards, on the tenth day of August, 1921, there was filed in the said Court the following

ORDER ALLOWING WITHDRAWAL OF ORIGINAL EXHIBITS

On motion of Griffith, Leiter & Allen, solicitors for John E. Gilchrist, complainant, and good cause appearing therefor, it is by the Court now ordered:

That all the exhibits in the above entitled case, both complainant's exhibits and defendant's exhibits, including logging blocks, parts of logging blocks, models, drawings, copies of patents, catalogues and advertisements, which are impracticable to have copied or duplicated, be, and they are hereby allowed to be withdrawn from the files of this Court in said case and transmitted by the clerk of this Court to the United States Circuit Court of Appeals for the Ninth Circuit as a part of the record upon appeal for the complainant herein to the said Circuit Court of Appeals; said original exhibits to be returned to the files of this Court upon the determination of said appeal by said Circuit Court of Appeals.

Dated this tenth day of August, 1921.

R. S. Bean, *Judge.*

Due, timely and legal service by copy admitted at Portland, Oregon, this tenth day of August, 1921.

Loyal H. McCarthy,
Attorney for Defendant.

And afterwards on the fifteenth day of August, 1921, there was filed in the said Court the following

BOND ON APPEAL

Know All Men by These Presents, that we, John E. Gilchrist, as principal, and Fidelity & Deposit Company of Maryland, as surety, are held and firmly bound unto F. B. Mallory Company, a corporation, defendant, in the sum of One Thousand ($1000.00) Dollars lawful money of the United States, to be paid to it, its successors or assigns; to which payment, well and truly to be made, we bind ourselves, and each of us, jointly and severally, our heirs, executors, administrators, successors or assigns, by these presents.

Whereas, the above named John E. Gilchrist, as complainant, has prosecuted his appeal herein to the United States Circuit Court of Appeals for the Ninth Circuit.

Now, therefore, the condition of this obligation is such that if the above named John E. Gilchrist shall prosecute his said appeal to effect and answer all costs if he fail to make good his plea, and satisfy the judgment appealed from, then this obligation shall be void; otherwise to remain in full force and effect.

Sealed with our seals and dated this 13th day of August, 1921.

JOHN E. GILCHRIST (Seal),
(Seal) *Principal.*
FIDELITY AND DEPOSIT COMPANY OF MARYLAND,
By E. G. McINTOSH,
Attorney in Fact (Seal),
Surety.

APPROVAL

The above and foregoing bond is approved this 15th day of August, 1921.

R. S. BEAN, *Judge.*

Due, timely and legal service by copy admitted at Portland, Oregon, this fifteenth day of August, 1921.

LOYAL H. McCARTHY,
Attorney for Defendant.

And afterwards, on the fifteenth day of August, 1921, there was filed in said Court the following

CITATION ON APPEAL

To F. B. Mallory Company and Loyal H. McCarthy, Its Attorney,

Greeting:

Whereas, John E. Gilchrist, complainant, has lately appealed to the United States Circuit Court of Appeals for the Ninth Circuit from a decree rendered in the District Court of the United States for

the District of Oregon, in your favor, and has given the security required by law;

You are, therefore, hereby cited and admonished to be and appear before said United States Circuit Court of Appeals for the Ninth Circuit, at San Francisco, California, within thirty days from the date hereof, to show cause, if any there be, why the said decree should not be corrected, and speedy justice should not be done to the parties in that behalf.

Given under my hand, at Portland, in said District, this 15th day of August, in the year of our Lord one thousand nine hundred and twenty-one.

R. S. Bean, *Judge.*

Due, timely and legal service by copy admitted at Portland, Oregon, this fifteenth day of August, 1921.

Loyal H. McCarthy,
Attorney for Defendant.

And afterwards, on the nineteenth day of August, 1921, there was filed in the said Court the following

PRAECIPE FOR TRANSCRIPT ON APPEAL

To the Clerk of the United States District Court:

Please incorporate the following papers, documents and exhibits in the transcript of record on appeal in the above entitled cause:

1. Bill of Complaint as amended by stipulated interlineation.
2. Amended Answer.
3. Condensed Record on Appeal.

4. Conclusions of the Court dated February 14, 1921.
5. Final Decree filed February 17, 1921.
6. Petition for Order Allowing Appeal.
7. Order allowing Appeal.
8. Bond on Appeal.
9. Order allowing Withdrawal of Original Exhibits.
10. Assignment of Errors.
11. Citation.
12. Order of Praecipe.
13. All Letters Patent introduced on Final Hearing.
14. Any Orders extending time of filing Transcript of Record.

Dated August 15, 1921.

GRIFFITH, LEITER & ALLEN,
Solicitors for Complainant.

Due, timely and legal service by copy admitted at Portland, Oregon, this nineteenth day of August, 1921.

LOYAL H. MCCARTHY,
Attorney for Defendant.

And afterwards on the eighth day of September, 1921, there was filed in the said Court the following

ORDER OF EXTENSION OF TIME

Upon motion of the complainant and appellant and for good cause shown, it is hereby ordered that the time for filing the transcript of record and the record on appeal herein in the United States Circuit Court of Appeals for the Ninth Circuit be extended to and including the first day of October, 1921.

Dated at Portland, Oregon, this 8th day of September, 1921.

R. S. Bean, *Judge.*

Due, timely and legal service by copy admitted at Portland, Oregon, this eighth day of September, 1921.

Loyal H. McCarthy,
Attorney for Defendant.

And afterwards, on the 14th day of September, 1921, there was filed in said Court the following

CONDENSED RECORD OF PROCEEDING ON FINAL HEARING UNDER EQUITY RULE 75

The trial commenced Tuesday, June 1, 1920, and concluded Monday, June 7, 1920.

Opening statements of counsel for the parties omitted.

Stipulated that printed sales copies of patents may

be introduced in evidence by either party without certification.

Complaint introduced in evidence certified copy of letters patent to John E. Gilchrist No. 977,613, dated December 6, 1910, and the same was marked "Complainant's Exhibit No. 1."

Complainant introduced in evidence a certified copy of letters patent to John E. Gilchrist No. 1,063,528, dated June 3, 1913, and the same was received and marked "Complainant's Exhibit No. 2."

Complainant introduced in evidence a comparative drawing of the Gilchrist block and the Mallory block, and the same was received and marked "Complainant's Exhibit No. 3."

> Mr. McCarthy: "With the explanation that this is merely as shown in the patent, not as claimed, that we are admitting, and that we deny the cross-head is as shown in the lower right-hand corner."

Defendant admits that F. B. Mallory Company is a corporation and a resident of the District of Oregon.

It is stipulated that the complainant is the owner under his letters patent, set forth in the complaint, of whatever rights he may have secured through the issuance to him of said patents.

TESTIMONY OF LEWIS E. YOUNIE, called as a witness for the complainant:

Age, 43 years; residence, Tacoma, Washington; occupation, mechanical engineer at present employed

as chief engineer by Puget Sound Iron & Steel Works, which is the largest shop and manufacturing plant in Tacoma, Washington. The duties of his position are designing logging and hoisting machinery; has been with Puget Sound Iron & Steel Works since December, 1919; before that was employed as chief engineer by the Pacific Marine Iron Works of Portland, Oregon, as chief engineer with the duties of designing machinery manufactured by the employers; was with Pacific Marine Iron Works for two years and prior to that time was employed for six years by Willamette Iron & Steel Works of Portland, Oregon, as mechanical engineer with the duty of designing logging machinery and accessories; designed the line of logging blocks manufactured by Willamette Iron & Steel Works, being employed by them from 1910 to 1916; prior to 1910 employed by Puget Sound Iron & Steel Works, Tacoma, Washington, as machinist, for seven years; attended Iowa State College of Ames, Iowa, taking a course in mechanical engineering; for past twenty years has had actual experience in the Pacific Northwest in the designing and handling of logging blocks, logging equipment, accessories, etc., and during that time has been in the woods to inspect the operation of the logging machinery which he is designing. Has been familiar with the logging block industry of the Pacific Northwest since 1900, seeing the blocks manufactured and seeing them used; has assembled such

logging blocks; is familiar with every part of them, and is familiar with the Mallory block.

Witness temporarily withdrawn.

TESTIMONY OF G. C. HUMKE, called as a witness on behalf of Complainant:

Witness stated that he is 25 years of age; a resident of the City of Portland, Oregon; present occupation with Paulson Machine Works; in 1918 for 8 months worked for the defendant company in Portland, Oregon, as production man, having charge of handling the parts of the Mallory line of blocks; that he was familiar with the assembling of the Mallory blocks and knew the line of blocks that Mallory handled in 1918; general catalogue of F. B. Mallory Company issued in 1917 was introduced and received in evidence and marked "Complainant's Exhibit No.4."

The Mallory logging block was introduced and received in evidence and marked "Complainant's Exhibit No. 5," the defendant admitting that the exhibit was its logging block.

Witness stated that during 1918 there were on sale by the defendant types of block the same as Complainant's Exhibit No. 5, dissimilar only in dimensions, shown in defendant's catalogue Exhibit No. 4, as No. 19, page 37; No. 17, page 39; No. 21, page 41; No. 29, page 43; No. 21, page 45; No. 40, page 47; No. 139, page 50; No. 22, page 57; Nos. 66 and 67, page 64; Nos. 266 and 267, page 65; Nos. 42, 43 and 44, page 70; Nos. 50, 51 and 52, page 73; that all of the numbers given above were the same as Complainant's Exhibit No. 5, except for

changed dimensions of sheave, pin and side and were on sale in 1918 by the defendant. A logging block marked "Mallory Sky Line Block No. 49" was introduced and received in evidence and marked "Complainant's Exhibit No. 6." This was admitted by the defendant to be its logging block.

Witness referred to defendant's catalogue, Exhibit No. 4, and stated that in 1918 the defendant had on sale types of block similar to Complainant's Exhibit No. 6, and dissimilar only in point of dimensions, in the following catalogue numbers: Nos. 45, 46, 47, 48 and 49, shown on page 68; Nos. 150, 151 and 152, shown on page 72; that Nos. 150, 151 and 152 were only made on special order; that all of the blocks identified by the witness by number in the catalogues were on sale on the floor of defendant's store room in 1918.

UPON CROSS EXAMINATION:

Witness' attention called to figure 23, page 40 of defendant's catalogue and he stated that this block was carried by the defendant while he was in its employ; that the block last referred to has a grease cup in place of an oiling side; that the elbow is supposed to be used for grease; that grease blocks are made with a plug that screws in to press the grease.

"Q. The elbow blocks are not made that way, are they?

"A. This elbow block here has a pipe plug in it.

You can screw it part way down. Maybe you can use oil in that.

"Q. Soft oil?

"A. I think you can, yes.

"Q. Well, do you know whether they did use soft oil in those or not?

"A. No, sir, I don't.

"Q. You don't know?

"A. In fact, I don't recall 23 ever being made with elbow oil-cup while I was there."

Witness LEWIS E. YOUNIE resumed stand and direct examination continued:

Witness examined Gilchrist block marked "Willapa Harbor Iron Works," compared it with patent No. 977,613, and stated that it conforms to the specifications and drawings of said patent. Whereupon, said block introduced and received in evidence as Complainant's Exhibit No. 7.

Witness examined Gilchrist block marked "Gilchrist-South Bend," and stated that it conforms to the specifications and drawings of Patent No. 1,063,-528. Whereupon, said block was introduced and received in evidence, and marked "Complainant's Exhibit 8."

Witness analyzed Patent No. 977,613 and stated from the specifications and drawings of said patent the parts which go to make up the same. Witness stated that the function of the cross-head No. 8 is three-fold—supports the block, keeps the sides in

their correct relative position and keeps the line in its proper place.

Witness stated that drawing of the Mallory block on Exhibit No. 3 is an accurate representation of the structure as evidenced by Exhibit No. 6, except as to the upper part of the drawing with reference to the cross-head.

Witness stated that the operation of the Mallory block is identical with the operation of the Gilchrist block, except that the Mallory block has an oil chamber in each side and, therefore, the pin has two openings for the passage of oil from each of the oil chambers to the sheave; that the operation of the two blocks is identical.

Witness then referred to Patent No. 1,063,528, analyzed the same and described the operation and function of the several elements thereof. Witness stated that element 12, the Mallory guard, as shown on Exhibit No. 3, differs from the guard in the Gilchrist Patent No. 1,063,528 in that the Mallory guard has four ears, while the Gilchrist guard only has two ears, and that there is also a difference in the width of that part of the guard which lies longitudinally between the sides of the block, the Gilchrist part being wider than the Mallory part; that both guards perform the same function and that such function is to hold the side pieces in their relative positions, to prevent the strain on the block in drawing the sides together, thus cramping the sheave and retarding its rotation; that such guards

co-operate with every other element of the block in that if the sheave were retarded or stopped, the block would not perform its work; that if the shackle shown on Exhibit 6 is made large, strong and stiff enough it performs the functions of the line guard; that the shackle has the function of supporting the block and keeping the sides in their relative positions, and that such function is important for if the sides pulled together, then the sheave would bind and stop rotating.

Witness further compared the Mallory and Gilchrist sheaves and showed wherein they were identical, each having a long extended hub reaching out into the annular recesses; that the function of the long bearing was to increase the bearing surface and reduce the bearing pressure, the amount of pressure per square inch; that logging blocks are subject to terrific strains and loads and if the bearing is narrow, the pressure is so great as to squeeze out the bushings. That the annular recesses of the sides function to provide for the extended length of the pin and the increased area of bearing surface and to accommodate the long hub; also such recesses function to make the block a little less accessible to dirt and foreign matter, and dirt would tend to roughen the surface of the pin, wearing the same out more rapidly than if the bearing were kept clean.

Witness compared the Mallory pin with the Gilchrist pin and stated that the function of each is

identical in that each holds the sides of the block in proper position by having the sides rigidly secured against the shoulders of the pin; that the Mallory pin differs from the Gilchrist pin only as to the number of openings for the admission of oil from the oil chambers; that their functions are absolutely the same.

UPON CROSS EXAMINATION:

Witness stated that the swivel is the mechanical equivalent of the goose neck for the purpose of carrying the load of the block; that the "H" guard shown on Complainant's Exhibit No. 5 is the mechanical equivalent of the "Z" guard shown on Complainant's Exhibit No. 8; that if the connecting bar in the "H" guard were removed it would have the function or purpose of the guard in that it would make it more flimsy and one would fail to get combined strength of the two side pieces of the guard; that it would be just a question of the degree of strength, and if the side pieces of the "H" guard would be heavy enough without the connecting member, then they would hold the sides in their relative position; that there is a stress and strain on the connecting member of the "H" guard, although the main tension is longitudinally of the sides of the guard; that the purpose for which the guard is placed in the block is to take what would be the longitudinal strain on the side links of the guard. The fact that there are four ears on the "H" guard

would not have a tendency to strengthen the sides of the guard against a racking back and forth; that the "H" guard with four lugs is a little stronger than the "Z" guard with two lugs; that the only way in which the "Z" shaped bar can overcome tension is by the fact that it is snugly fitted between the sides by a solid piece.

The witness stated that he had taken into consideration the prior art in his analysis of the Gilchrist patent; that a long hub is necessarily referred to in Claim 4 of Patent No. 977,613 at line 114 of page 2 of the specifications and claims; that Claim 4 discloses a long hub where it provides that "parallel sides having annular recesses in their adjacent faces" and goes on later to say that the pin extends into those recesses; that as soon as the annular recess is introduced, it would make for a longer hub no matter whether the recesses were one-thirty-second of an inch deep or an inch deep; witness' attention was called to the language of the claim, "a sheave journaled for rotation upon the pin and having oppositely disposed bosses adapted to fit closely but anti-frictionally in the recesses," and stated that the purpose of the extension of the hub into the recesses is not to form a dust-proof bearing, but is for the purpose of forming a long bearing; after an examination of the hub of the Gilchrist block and of the Mallory block the witness stated that the hub of the Mallory block does not extend into the recesses at right angles to the shell but that the end

of the hub is on an angle of about sixty degrees; that the Mallory sheave is not intended to fit closely in the annular recess, and that no hub is supposed to fit closely in that place; that the close fitting of the Gilchrist claim is important in preventing of dirt from working into the bearings; that the "Z" shaped guard would not be as practicable if the center piece did not fit snugly between the sides; although it would be considered practical and would perform all of its functions; that said "Z" guard will not perform the function of preventing the crowding in of the sides to the extent that it will if the cross bar is closely fitted between the sides; that the "Z" shaped guard, of the same material and thickness, by reason of the two right angles in its construction, would not be as strong as a single span going directly from one side to the other; that the cross-head performs the function of the guard and shackle and one cannot use both the guard and cross-head on the same block for they occupy the same space; that the specifications of the Gilchrist patent called for a double lug on the top of each side and a single lug on each side of the shells. The witness was shown wash drawing of "top view of Gilchrist's top as described in patent No. 977,613, and stated that the same is a correct representation of parts 6, 7 and 8; drawing then introduced and received in evidence, marked Defendant's Exhibit "A"; witness testified that top portion on Defendant's Exhibit "A," denominated "No. 8," including the central portion and each of the lugs No. 7, would form a letter "H."

"Q. The only function that the top 8 has, outside of supporting the block itself, is to act as a guard to keep the rope down to the sheave, from getting up into the tackle, and also as a spacer between the sides, to keep the sides from crowding in?

"A. Yes; and also to provide the other part of the swivel, allowing this block to turn around."

UPON RE-DIRECT EXAMINATION:

Witness stated that cross-head has the additional function over the "H" guard, of effectively supporting the block in the woods; that if the connecting bar is removed from the guard "H" it will leave the two sides so that they would act independently with a racking motion, and the effect of retaining the bar is to make the guard rigid by tying the two links together; that with four ears, as in the "H" guard, one can make part 12 narrower than in the "Z" guard "because you would depend on the fits of the parts, on the pins getting their contact, instead of getting contact between the two sides, against this part No. 12 in this construction"; that the "H" form of guard functions in the same way as the "Z" form of guard and the "H" form of guard with a narrow part 12 is the same as the "Z" form of guard with the wide part 12; that the drawings of the Gilchrist patent show that the hub is much longer than the width of the sheave, the ends of the hub entering into the annular recesses.

"Q. Will you turn to page 2 of that patent 977,-613, and read from line 10 to line 15?

"A. The sheave 20 is adapted to be journaled for rotation upon the bearing pin 24; and this sheave 20 is provided upon its outer faces with bosses 21, adapted to fit closely, yet anti-frictionally, in the recesses 17 of the sides 1 and 2. The shoulders 26 upon the pin 24, prevent the sides 1 and 2 from bearing against the sheave 20.

"Q. Does that describe a long hub?

"A. Yes, sir."

(*Transcript of Testimony, pages* 47 *to* 48.)

That the principal object of the long hub is to increase the bearing area of the pin to reduce the bearing pressure per square inch and incidentally to make the bearing less accessible to dirt and grit; that the bevel of the ends of the Mallory hub results in the hub not fitting as closely into the recesses and consequently not keeping out the dirt as effectively as does the Gilchrist hub; that the main feature of the extension of the hubs into the recesses is to increase the bearing area.

UPON RE-CROSS EXAMINATION:

Witness stated that the stress on the "H" type of guard comes entirely upon the pins; that the purpose of snugly fitting the piece of the "Z" shaped guard between the sides is to take up the compression strain.

"Q. That is true. I misspoke that. I mean the compression, the stress of compression, would be entirely upon the pins in one case, and upon the piece of metal fitting snugly between the cheeks in the other?

"A. I gave you a qualified answer to that before, I think. If the contact was on the sides of this piece or part No. 12 before the contact between the holes in the ears, then that would be true; but if the pins bent forward of the holes and took the load at the same time, then it would be simultaneous.

"Q. When the block was brand new, possibly; but with the slightest wear, there would be greater wear on the pins than on the sides of this piece of metal in between?

"A. I don't know as there would ever be any wear on that point.

"Q. No wear at all. But there would be wear on the pin, would there not?

"A. Not necessarily; not necessarily from the load.

"Q. That is the object of the member fitting snugly between the cheeks, that the compression will come on the metal and not on the pins, is it not?

"A. I don't know whether that was the object or not. That is the fact of the case.

"Q. That is the function that piece performs?

"A. Yes.

"Q. And there is no such function performed by the letter "H," is there?

"A. No, he gets his load directly from the pins.

"Q. From the pins only?

"A. Yes.

"Q. In other words, the letter "H" gets its load in exactly the same way as two independent bars would get it fastened directly across from one pin to the other, does it not?

"A. Yes; if the pins fitted in all four holes at the same time, yes.

"Q. The compression would all be through the means of the pins? Is that not true?

"A. Yes, it would be through the means of the pins, in any event."

(*Transcript of Testimony, pages* 50 *and* 51.)

UPON RE-DIRECT EXAMINATION:

That machine fitted pins are never used in logging blocks; considering the result to be obtained, the "H" form of guard is equivalent to the "Z" form and performs the same function and by substantially the same means.

UPON RE-CROSS EXAMINATION:

"Q. And if the supporting member between the sides were removed, would it still be the equivalent?

"A. Yes, to the same extent.

* * * * * * * * *

"Mr. Cary: That concludes our prima facie case, with the exception of this statement I would like to

have in the record. I have reference to the fact that we have asked in our prayer for an accounting.

"Court: Very well. The matter will rest until the question of the infringement has been determined."

(*Transcript of Testimony, pages* 52 *and* 53.)

Complainant rests.

TESTIMONY OF ROBERT GILLESPIE, called as a witness on behalf of the defendant:

Witness stated that he lived in Seattle, Washington; that he recalled a conversation with the complainant concerning his logging blocks, during the year 1914.

"Q. Will you kindly state the substance of that conversation?

"A. I was in South Bend along towards October or November, 1914, and called on Mr. Gilchrist on business. When there we talked of blocks, and he asked me if we would take his agency in Seattle. I said we couldn't do it, on account of the fact that we were agents for Mallory. He said Mallory had no right to sell these blocks on account of the fact that he had a patent, and I asked had he taken the matter up with Mallory. He said, 'No.' And I said, 'Why not?' He said he was waiting until Mallory got enough of them out to make it worth while."

(*Transcript of Testimony, page* 54.)

UPON CROSS EXAMINATION:

Witness stated that he told Mr. Mallory the substance of his conversation with the complainant about ten days afterwards; that at that time the witness was selling the defendant's line of blocks and has represented the defendant in the sale of said line of blocks since that time; that the witness has been handling the oil reservoir blocks of the defendant which are in suit; that witness never handled the Gilchrist blocks; that witness communicated the conversation with complainant to Mr. Mallory in person and not by letter.

"Q. Now, at that time you were interested with Mr. Mallory in a business way?

"A. No. We were selling his blocks.

"Q. Didn't Mr. Mallory have an interest in the corporation with which you were identified at that time?

"A. No.

"Q. No interest at all?

"A. No, sir.

"Q. And he hasn't today?

"A. No, sir.

"Q. And you have no financial interest between you and Mr. Mallory?

"A. No, sir.

"Q. Has the F. B. Mallory corporation any interest in your concern?

"A. No.

"Q. Have any of the interest in which Mr. Mallory is interested an interest in your concern?

"A. No.

"Q. Who are the stockholders of your institution?

"A. Myself.

"Q. Yourself?

"A. Yes.

"Q. And you tell me that Mr. Mallory has never had any interest in your outfit?

"A. No, sir.

"Q. The only reason you told him this matter was because you were agent for his blocks?

"A. Exactly."

(*Transcript of Testimony, pages* 55-56.)

TESTIMONY OF F. B. MALLORY, called as a witness on behalf of the defendant:

Witness stated that he was president and manager of the defendant company, which is engaged in the business of selling logging equipment, wire rope and logging supplies, including the handling and manufacturing of logging blocks; that witness has been engaged in this line of business since 1902, and for himself since 1907, handling logging blocks since 1902; that logging blocks with long hubs have been handled since 1905 or 1906, his own experience dating back to 1907; the defendant introduced in evidence its catalogue No. 1, of 1907, and the same was received and marked "Defendant's Exhibit B." That the said catalogue was distributed among the

trade at the date of its issuance and that defendant carried and sold all the blocks illustrated in said catalogue.

Witness identified Geary Block on page 6, the dirt-proof Columbia Yarding Block on page 5, the Return Line Head Blocks on page 9, and the Columbia or Skookum Trip-line Blocks on page 8, and the Return Line Head Blocks of the Columbia Engineering Works on page 10 of said catalogue, as being blocks having a long bearing and hub. Witness' attention called to page 7 of said catalogue, wherein is shown a logging block with an elbow device, and stated he carried that block, the construction of which he explained as "a block made with an elbow screwed on the end of the pin, for the purpose of holding oil, which was fed the bearing through a hole drilled in the end of the pin, lengthwise of the pin with a hole cross-drilled so that the oil was conveyed to the bearing sheave."

Defendant introduced Mallory Block Diamond "M" No. 10, and the same was received and marked Defendant's Exhibit "C"; witness stated that he had manufactured a similar block since 1907 and was handling them as far back as 1902; that a pattern of Defendant's Exhibit "C" was made in 1911, but construction was used before that; soft oil was used in Defendant's Exhibit "C" prior, but also grease in some instances; that the purpose of putting the elbow on Defendant's Exhibit "C" was to hold oil to feed by gravity into the bearing; that the next

development in oil chambers was to fit on a reservoir holding a larger amount of oil, which is indicated by Mallory Block Diamond "M" No. 10, introduced in evidence by defendant, and received and marked "Defendant's Exhibit D." That Defendant's Exhibit "D" had been manufactured off and on since 1907 and the purpose of the extension on the elbow was to furnish greater oil capacity to act as an oil reservoir.

Defendant presented the block shell and pin of a Bouse Yarding Block and the same was marked for identification as "Defendant's Exhibit E." Witness has handled block with pins of the type of Defendant's Exhibit "E" since prior to 1905, and since that date pins have been provided with shoulders.

Defendant introduced an advertisement of The Timberman of January, 1906, and the same was received and marked "Defendant's Exhibit F."

It was stipulated that The Timberman is a technical magazine of general circulation in the Northwest.

Witness stated that he is familiar with the Bouse Blocks shown as Defendant's Exhibit "F"; witness was also shown page 46 of January, 1906, and he stated that the line of blocks shown were manufactured by the Pacific Iron Works of Astoria, and that he sold some of them in 1906; that the pin was made by a hole drilled in the end, cross-drilled to the surface, and an oil cup screwed to the end of the pin, which contained oil, the oil being fed through the

hole in the end of the pin and to the bearing; that said pins were shouldered so that the nuts screwed up against the shoulder kept the sides from binding together and cramping the sheave. Said page 46 was introduced and received in evidence and marked Defendant's Exhibit "G."

Defendant also offered in evidence advertisement shown on page 49 of the January, 1916, Timberman and the same was received and marked "Defendant's Exhibit H." Witness stated that he is familiar with the construction of the block indicated in the last advertisement and he described the construction as follows:

"A. The pin was fitted with an oil reservoir that screwed on its end, the oil being fed to the bearing through a hole that was vertically drilled and then cross-drilled to the sheave bushing, and the pin on one side, on the front end, was made with a shoulder, so that the nut would screw up against that shoulder and keep the side in position."

Defendant introduced advertisement on page 18 of the October Timberman of 1907, and the same was received and marked "Defendant's Exhibit I." Witness stated that he is familiar with block advertised in Defendant's Exhibit "I" and explained the construction thereof as follows:

"A. This is a block that was made at that time by the Columbia Engineering Works. The pin screwed into both sides, both ends of the pin being fitted with a shoulder. The pin was drilled hollow and then

cross-drilled, and a plug fitted in the end, and that hollow recess was filled with grease. There was a sheave with extended hub or long bearing, that was mounted on this pin, and the ends of the bearing or the hubs of the sheave were received in an annular recess on each side. It was called at that time the 'Dirt Proof Block.'

"Q. Did those hubs fit closely in the annular recesses of the sides?

"A. They did."

Defendant introduced advertisement on page 25 of The Timberman of January, 1908, and the same was received and marked "Defendant's Exhibit J."

Witness described the block shown on last exhibit as follows:

"That is a block that was made with two sides, made of plate steel, and sheave mounted on a pin. The pin was made with a nut on the back or end side, that was screwed up against the shoulder to keep the back shell in place, and on front end of the pin there was an oil cup attached, that fed oil or grease through a hole drilled vertically through the pin to the center, and then cross-drilled to the bearing. That also had a shoulder on the front end of the pin."

Witness stated that all of these blocks have parallel sides, a sheave and a sheave journaled to rotate upon an axial pin; that it is the common form of construction since 1904 or 1905 to have shells with annular recesses in the sides, also from the same time to have a long bearing pin and a long hub; that

since 1902 it was a common form of construction to provide logging blocks with oil chambers, that all logging blocks have a top of some kind holding the sides together at the top. The defendant introduced page 29 of January, 1908, of The Timberman and the same was received in evidence and marked "Defendant's Exhibit K."

Witness described the blocks shown in last exhibit as follows:

"It was a block composed of two sides, a pin, and a sheave mounted on this pin. The pin was provided with a nut on the back part that screwed up against a shoulder, to keep the back shell in position, and the front end was fitted with an oil reservoir that contained oil, which was fed to the sheave bearing through a hole drilled in the end of the pin and cross-drilled to the bushing or bearing; also provided with a shoulder on the front end, so that the side was kept in place."

Defendant introduced an advertisement of the Vulcan Iron Works on page 45 of The Timberman of 1907 and the same was received in evidence and marked "Defendant's Exhibit L." Concerning the block shown in the last exhibit witness said:

"That block was made with cast steel sides, between which a sheave was mounted on a pin. The back end of the pin screwed into the back shell, was threaded into the back shell and screwed up against the shoulder, and the front end of the pin was drilled and then, vertically drilled to about the center and

then cross-drilled, so that the lubricant or oil could feed to the bearing, and the hole in the front end of the pin was filled with a plug, to keep out dirt and keep the oil in. Then the front shell screwed on the end of the pin, up against the shoulder."

Defendant offered in evidence an advertisement of the Skookum block, page 18 of the January, 1908, Timberman and the same was received in evidence and marked "Defendant's Exhibit M." Concerning the block shown in the last exhibit witness said:

"It is a block that was made by the Columbia Engineering Works, had two cast steel sides, between which a sheave was mounted on a pin or axle. One end of the pin was fitted with a nut that screwed up against a shoulder, and the other, the front end, was furnished with a similar nut, and the pin itself was drilled hollow for the purpose of containing oil, furnishing an interior oil chamber, you might say, and a plug was attached to the end of the pin, to keep the lubricant in and the dirt out.

"This block was also furnished with an annular recess in both sides, similar to that previously described.

"This recess was furnished with a cap, that fitted over the end of the pin. It fitted very closely.

"With the idea to keep out the dirt and grit.

"The hub of the sheave was extended on both sides, furnishing a long bearing, and fitting into the recesses in the sides."

Defendant introduced an advertisement of the Vulcan Iron Works on page 53 of the February, 1908, Timberman, and the same was received in evidence and marked "Defendant's Exhibit N." Witness stated that the construction of the block disclosed by Exhibit "N" is the same as that of Exhibit "E."

Defendant introduced an advertisement on page 38 of the February, 1908, Timberman, and the same was received in evidence and marked "Defendant's Exhibit O." Concerning the block shown in this advertisement, witness said:

"This is an advertisement and description of a block that was made by C. B. Borquist—Head Trip Line Block. It was made with two plate steel sides, an annular recess being provided in the sides by an offset in the strap. There was a sheave with extended hub that was mounted on a pin, and that pin was furnished with a straight oil cup or reservoir on the front end, the same as previously described."

(*Transcript of Testimony, page* 70.)

Defendant introduced an advertisement of the Portland Tool Works on page 66 of the February, 1908, Timberman, and the same was received in evidence and marked "Defendant's Exhibit P."

Defendant introduced its advertisement on the back cover of the February, 1908, Timberman, and the same was received in evidence and marked "Defendant's Exhibit Q." Witness described this block

as having a drill pin and with sides screwing up against shoulders on the pin."

Defendant introduced an advertisement of the Pacific Iron Works on page 78 of the February, 1908, Timberman, and the same was received in evidence and marked "Defendant's Exhibit R."

Defendant introduced photographic reproduction of page 43 of The Timberman of February, 1911, and the same was received in evidence and marked "Defendant's Exhibit S."

Referring to the cross piece between the shackle and the sheave shown on Exhibit "S" witness stated:

"This has two projections that are cast integral with each side, and meet in the center forming a cross-head or cable guard across the lugs below the shackle.

Mr. McCarthy: I offer that in evidence.

Marked "Defendant's Exhibit S."

Mr. Cary: You testify there is a crosspiece there?

"A. No, sir.

Mr. Cary: Just two straps."

Witness stated that all blocks concerning which he has testified were manufactured and sold at the time of advertisement, and that he has personally handled all these blocks, except the block of the Pacific Tool Works; that these blocks have been continuously on the market since the time of their introduction, except as discontinued.

Witness testified that he had the following correspondence with the plaintiff:

"235-237 Pine Street,
Portland, Oregon,
November twelfth, 1914.

Mr. J. E. Gilchrist,
South Bend, Washington.

Dear Sir:—

While in Seattle recently, Mr. Gillespie of the Mill & Mine Supply Co., called the writer's attention to out pattern of auto-lubricating sky line blocks and stated that in the course of a recent conversation with you you had complained to him of this pattern of ours conflicting with a patent which you have on a logging block with oil reservoir in one side.

As it is not our intention to at any time conflict with another's rights in such matters, we have taken the matter up with a firm of Patent Attorneys at Washington, D. C., sending them cut and full description of our block and asking them to thoroughly search the patent records and inform us if our pattern conflicted in any way with others recorded. We have received their written opinion on this subject citing eight patents on similar blocks issued prior to your patent of December 6th, 1910, the oldest of these being a British patent of January 12th, 1893, and they state in their written opinion, in view of the fact that the prior art is pointed out in these eight other patents it would appear to clearly anticipate all the claims of the Gilchrist patent, and it is their opinion that we are not conflicting in any way, shape or form.

Since receiving this opinion from them, we have referred the subject to our own attorney here at Portland, and his opinion is in accordance with that received from Washington.

Will be very glad to show you the written opinion that we have received on this subject together with copies of prior patents, as it is not our desire to impose upon any rights that you may have, and believe that we can convince you beyond a doubt that we are within our rights in manufacturing a block with an oil reservoir in each side.

Yours truly,

F. B. Mallory Company.

F. B. Mallory, Pres."

* * * * * * * *

"November 16th, 1914.

F. B. Mallory Co.
Portland, Ore.
Gentlemen:

We received your favor of the 12th inst., and with interest noted contents. It is true that we have considered your manufacture of pattern of auto-lubricating Sky Line Blocks during the past few months, and have come to the conclusion that your pattern is interfering with our patented 'Gilchrist self-oiling Blocks.' This, our claim is based on an opinion from our Patent Attorneys at Washington, D. C., which we received a short time ago. We are surprised to learn from your letter of the existence of other patents on blocks similar to ours and as you stated having such copies in your possession and expressed

your willingness to also let us read the opinion of the Patent Attorneys, we will be very grateful if you will grant us this privilege and will duly return same to you.

Thanking you in advance for this favor, we are

Yours very truly,

WILLAPA HARBOR IRON WORKS,
John E. Gilchrist,
Per William Hegele."

(*Transcript of Testimony, pages* 73, 74 *and* 75.)

* * * * * * * * *

"November Seventeen, 1914.

Willapa Harbor Iron Works,
South Bend, Washington.

Gentlemen:

We have your letter of November 16th, and will be very glad to let you read the copy of our Attorney's opinion on Patents referred to, as well as submit copies of the Patents themselves. We think, however, inasmuch as this literature is rather bulky to send by mail, that the best plan would be for you to call at the office the next time you are in town and let us show you these papers, in person, as otherwise, they are liable to become mislaid or lost.

If, therefore, you will advise about what time you will be in Portland, will arrange to see you accordingly.

Yours truly,
F. B. MALLORY COMPANY,
F. B. Mallory, Pres."

(*Testimony, page* 76.)

* * * * * * * * *

"November 25th, 1914.

F. B. Mallory Co.,
Portland, Ore.
Gentlemen:—

We received your favor of the 17th inst. in regard to copies of your Attorney's opinion on Patents in question. While we are desirous of reading this opinion it is at this time impossible for us to leave our office and consequently have to await opportunity for this purpose. However, as we have stated in our letter previously our claims for your interference with the manufacture of the auto-lubricating Blocks are based on the statement of Attorneys at Washington, D. C.

Our Mr. Gilchrist having been absent from this office for a few days we are compelled to let the matter rest for a decision of Mr. Gilchrist.

Very truly yours,
Willapa Harbor Iron Works,
Per William Hegele."
(*Transcript of Testimony, page* 77.)

* * * * * * * * *

"April 26th, 1915.

F. B. Mallory Co.,
Portland, Ore.
Gentlemen:—

In your letter of (blurred) advised us that you had in your possession copies of prior patents of self-oiling Blocks. For the past few months we have endeavored through our attorneys at Washington, D. C., to secure these copies, but as we have been informed by them they are unable to find any records in reference to self-oiling Pulley Blocks. We therefore take the liberty of asking you to kindly

give us No. of these old patents you referred to in your favor of Nov. 17th, and for this favor we thank you in advance.

Very truly yours,
WILLAPA HARBOR IRON WORKS,
Per William Hegele."

(*Transcript of Testimony, pages* 77 *and* 78.)

* * * * * * * * *

"April Twenty-nine, 1915.

Willapa Harbor Iron Works,
South Bend, Wash.
Gentlemen:—

In reference to your letter of April 26th, our Mr. Mallory is out of town for a few days, but will undoubtedly furnish you with the information desired upon his return the latter part of next week.

Yours truly,
F. B. MALLORY COMPANY."

(*Transcript of Testimony, page* 78.)

* * * * * * * * *

"Portland, Oregon,
May 6, 1915.

Willapa Harbor Iron Works,
South Bend, Washington.
Dear Sirs:

Your letter of April 26th addressed to F. B. Mallory Company concerning the self oiling block patents, has been referred to me for answering.

In response to your request for copies of patents of self oiling blocks taking priority over your patent, I would refer you to the following references, whereupon you may send to the Patent Office for the copies, to wit:

Labadie, No. 513,067, Jan. 16, 1894,
Tarbox, No. 823,231, June 12, 1906,

Tousley, No. 520,973, June 5, 1894,
Davis et al., No. 973,177, Oct. 18, 1910,
Lindsay, No. 847,955, Mar. 19, 1907,
Lockfaw, No. 964,284, July 12, 1910,
Martin, No. 942,274, Dec. 7, 1909,
Morgan et al. (British), No. 712 of 1893.

From my examination of your patent in connection with the foregoing patents, it seems to me that there is no ground upon which F. B. Mallory Company could be considered as infringing upon your patent. I am corroborated in my opinion on this matter by Munn & Co., of Washington, D. C.

If after an examination of these patents you are still of the opinion that F. B. Mallory Company would be guilty of an infringement of your patent, kindly write to me and state the grounds upon which you base your opinion, for I wish to assure you that we would want to have a satisfactory adjustment of the matter if F. B. Mallory Company was in any way infringing upon your patent.

Very respectfully yours,

LOYAL H. MCCARTHY."

(*Transcript of Testimony, pages* 79 *and* 80.)

Witness stated that he received no further letters from the plaintiff subsequent to the letter of May 6, 1915, until about six weeks prior to the filing of this suit.

Defendant offered a logging block marked "Gilchrist—South Bend," and the same was received in evidence and marked "Defendant's Exhibit T." Concerning Exhibit "T" witness testified that it was a Gilchrist block made by the Willapa Harbor Iron

Works of South Bend, Washington, of which Works the plaintiff was manager and owner; that Exhibit "T" was bought upon the open market; that it bears patent marks, "Patented June 3, 1913," and bears no patent marks showing date December 6, 1910; that Exhibit "T" contains an oil reservoir in the side with an opening adjacent to the top, a shoulder pin, a projecting hub fitting closely into the annular recess, a hole communicating with the center of the pin in the oil reservoir, a hole extending from the interior chamber of the pin to the bearing surface of the pin; that the annular recess of the Gilchrist block is practically at right angles, furnishing almost a tight fit for the end of the hub, while in the Mallory block the recess is nothing but a rough casting and not machined nor intended to fit the end of the hub; that Mallory blocks are not made with a dust-proof hub; that blocks of the design of Exhibit "T," manufactured by the Willapa Harbor Iron Works, and designated as the Gilchrist blocks, are generally put upon the market without the patent date of December 6, 1910, upon them; referring to plaintiff's catalogue of logging blocks, witness stated that Exhibit "T" is the same general design as the block shown on pages 30 and 31 of said catalogue and marked and catalogued as "No. 151-A"; that the cut of said blocks as shown in plaintiff's catalogues has no patent markings of December 6, 1910, but bears the patent date of June 3, 1913.

Defendant offered the Gilchrist logging block with a 12-inch sheave and the same was received in evidence and marked "Defendant's Exhibit U." Referring to the last exhibit witness stated that he purchased the same in the open market, that it does not contain a "Z" shaped guard as claimed in the patent of June 3, 1913, and that it would be impossible to place such a guard on said exhibit because of the cross-head which is already on it.

Stipulated that so far as the type of oiling system is concerned Exhibits "T" and "U" are identical.

Witness stated that Exhibit "U" is on the open market, for sale generally, and carries no patent markings of December 6, 1910.

Defendant offered the Gilchrist block and the same was received in evidence and marked "Defendant's Exhibit V." Stipulated that Exhibit "V" is a Gilchrist block and is for sale on the open market. Witness stated that Defendant's Exhibit "V" has no "Z" shaped guard as described in plaintiff's patent of June 3, 1913; that the defendant has made a guard for display, and the same was offered and received in evidence marked "Defendant's Exhibit W."

UPON CROSS EXAMINATION.

The F. B. Mallory Company incorporated in 1912 under the laws of Oregon with principal office at Portland; plaintiff's Exhibit No. 1, United States Letters Patent No. 977,613 of December 6, 1910, is

specifically referred to in plaintiff's Exhibit No. 2, United States Letters Patent No. 1,067,528 of June 3, 1913; the logging blocks introduced as exhibits by plaintiff have the patent marks of December 6, 1910.

Witness admits that every block referred to by him on direct examination has its oil chamber outside of the block side, except the Gilchrist blocks.

Witness states that he is selling Defendant's Exhibit "D," although the same is not catalogued by him, the said exhibit being used as a loading block; that Exhibit "D" is not practicable for a moving block for the reason that the "cup protrudes and is liable to be knocked off"; moving blocks when in use have to plow through the dirt going over the hill and up the ravines, depending upon the nature of the country, and a smooth block with any protrusion on the side is impractical for moving purposes; Exhibit "D" form of block is practical as a loading block.

"Q. Then if you have an A-frame, and your block is hung from the top of the A, where the sides cross, no matter how long or short it may be, it is bound to strike the leg, isn't it?

"A. Not necessarily. It can be hung so it won't hit the legs.

"Q. I don't understand how you could hang anything from the forks of two crossing timbers, from the top of the A in such a way that it would not swing and hit either one of the legs.

"A. You have an A-frame. It simply depends on the angle you describe on the leg of the frame

whether you swing them close together, or whether you keep them apart, or whether the straps are swung long or short, so as to give the block sufficient clearance between the legs.

"Q. If hung from the joinder of the two, it is bound to hit the legs?

"A. Yes, but a logger would not make it that way if he were a real logger."

(*Transcript of Testimony, page* 94.)

A trip line block is a small block through which the main line is hauled back to the woods after bringing in its load to the donkey engine; the "trip-line" block is sometimes called a "haul-back" block; a trip-line is attached to a tree or a stump at the point of the angle in the main line, and under extraordinary conditions may have to sustain a strain of several tons, but for ordinary purposes not as much as that; when the weight is released from the main line or when the line breaks, the blocks are liable to end up, fly around, and hit against the stump, and the line may break and wrap around the stump; under such circumstances, the stove-pipe protusion of Exhibit "D" might be broken off.

Exhibit "D" with the stove-pipe reservoir would not be a practical block to use as a high-lead block, and would not last five minutes on high-lead work.

The sides of Plaintiff's exhibit 6 are interchangeable and made in the same pattern and this is true of all defendant's high-lead blocks.

Before the report from Mr. Gillespie of complainant's objection to my manufacture of auto-lubricating blocks, I had heard indirectly that the complainant had made remarks about the blocks we were making probably a few weeks before the report from Mr. Gillespie; received the report from Mr. Gillespie in November, 1914, and I wrote to Mr. Gilchrist on November 12, 1914, receiving his reply thereto of November 16, 1914. I received Mr. Gilchrist's letter of November 16, 1914, in which he said: "It is true we have considered your manufacture of pattern of auto-lubricating self-oiling blocks during the past few years and have come to the conclusion that your pattern is interfering with our patented Gilchrist Self-oiling Block."

The complainant by his letter of April 26, 1915, states that "for the past few months we have endeavored through our attorneys at Washington, D. C., to secure these copies, but, as we have been informed, they are unable to find any record in regard to self-oiling pulley block," and he asks me for reference to such patents; I referred his letter to my attorney, Mr. McCarthy, who on May 6, 1915, furnished complainant with a list of the patents requested; I don't know what the complainant did with that list of patents, although he stated that it was his purpose to submit them to his attorney at Washington; if I remember right, I never heard anything more from the complainant about this patent business until the spring of 1919.

"Q. You never heard anything that he said about your manufacture?

"A. Heard plenty that he said, yes.

"Q. In which he was complaining?

"A. In which he was criticising us, and calling us a great many names.

"Q. Yes, for your infringement manufacture?

MR. McCARTHY: Unless I might forget it, that letter was just brought up again. I have that date to supply. I found originally missing that letter, April 26th. The date in the first line is "In your letter of November 17, 1914, you advised us." (Referring to Complainant's Exhibit 29.)

"Q. So the last you heard from Gilchrist was in May, 1915, when you sent him the patents. Did you take the 'Timberman' of February, 1916?

"A. I did.

"Q. I show you a 'Timberman' of February, 1916, and call your attention to page 20 thereof. Did you see that as it was published?

"A. I suppose I did. I am a regular subscriber to the 'Timberman.'

"Q. And your advertisement appears on page 22?

"A. Of the same number.

MR. PECK: We would introduce this 'Timberman' in evidence, and I want to read this into the record. * * *

"Notice to users of self-oiling blocks: I am the original inventor and patentee of self-oiling blocks under patents issued December 26, 1910, June 3, 1913. I hereby give notice that I will hold legally responsible in damages all infringements of my patents covering the principle of

a hollow chamber carrying a lubricant to lubricate the sheave pin. (Showing cut of the block.) Gilchrist, the original self-oiling block universally used. Willapa Harbor Iron Works, John M. Gilchrist, Patentee."

(*Book introduced in evidence and marked "Complainant's Exhibit 9."*)

"Q. How long was this notice, for how many successive months was this notice carried in the 'Timberman'?

"A. I couldn't tell you that.

"Q. You have examined these files recently?

"A. Yes, but I don't know exactly how many months it was carried. For several months, but I can't tell you exactly how many. Three or four, possibly longer. I can't tell you exactly.

MR. PECK: Can't we stipulate was carried six successive months?

MR. McCARTHY: I don't know. Look through the numbers. They are there. If you look through and find them, we will stipulate to anything you can show me. By my statement I wouldn't want to admit as evidence; because I contend it is not competent evidence at all.

COURT: Merely the fact.

MR. McCARTHY: Yes.

"A. I think that is correct.

MR. PECK: From February to July, inclusive, 1916.

"A. I think so.

MR. PECK: It is stipulated from February to July, 1916, this advertisement was carried (*Exhibit* 9).

"Q. I also show you the 'Timberman' of August, 1916, and ask you if you are familiar with that ad-

vertisement of Gilchrist, as shown on page 22? Did you see this advertisement shown on page 22 of this 'Timberman'?

"A. I did.

"Q. And that advertisement has been carried to date?

"A. I think so.

(*Offered in evidence and marked "Complainant's Exhibit* 10.")

"Q. Your own advertisement was running in these 'Timberman' which have been stipulated into the record, and admitted as evidence, on these self-oiling blocks, were they not?

"A. Yes."

(*Transcript of Testimony, pages* 101, 102 *and* 103.)

I first heard of the Gilchrist blocks in about 1910 and 1911; I sold a few of complainant's blocks at that time subsequent to the issuance of the patent in suit; I don't know whether they were marked patented at that time or not. I ordered such blocks from the Willapa Harbor Iron Works (the complainant's trade name) and sold them to the trade. I first began the manufacture of my self-oiling block in March, 1914; the Clarke County Iron Works made the patterns for me in February, 1914.

"Q. Who made your drawings?

"A. There were no drawings.

"Q. No drawings to make the patterns from?

"A. No drawings to make the patterns from.

"Q. What were the patterns made from?

"A. They were made from ideas that were given to the pattern makers. Strange as it may seem—I will say for a long time—strange as it may seem, although we commenced making blocks in 1907, we didn't have a complete set of drawings on any of our blocks; in fact, didn't begin the complete set of drawings, that is, regular mechanical drawings, until this year.

"Q. So you had no drawings?

"A. We had no drawings.

"Q. For this improved block? What were the patterns made from?

"A. From sketches that I submitted to the pattern maker or salesman.

"Q. Where did you get these suggestions from?

"A. From my imagination, I suppose, ideas that came.

"Q. You had seen the Gilchrist block, hadn't you?

"A. I had.

"Q. You had one there in your shop, didn't you?

"A. Not at that time.

"Q. Now, Mr. Mallory, didn't you have a Gilchrist block in the shop at the time you made the sketches for your block?

"A. According to my memorandum, all the Gilchrist blocks were sent back to them about six or seven months after we sold the first one. I don't think we kept any stock of them. Gilchrist consigned us a stock of his blocks at one time, and we afterwards returned them. Whether or not there was a block bought afterwards, I cannot tell you exactly.

"Q. How long before you got your patterns in February, 1914, was it you were making these sketches?

"A. Commenced working on blocks of that design along the fall of 1913.

"Q. What time in the fall?

"A. I can't tell you; I think along in October or November.

"Q. October or November, 1913, was when you began making your sketches?

"A. I think so, yes.

"Q. What did you do with the blocks which you ordered from the Willapa Harbor Iron Works, of date October 31, 1913, and ask you if you sent the original, of which that is copy?

"A. I presume I did; signed by F. B. Mallory Company.

"Q. You don't deny it?

"A. I don't deny it, no.

MR. PECK: We offer the telegram in evidence.

(*Marked 'Complainant's Exhibit* 11.')

Portland, Oregon,
October 31, 1913.

Willapa Harbor Iron Works,
South Bend, Washington.

Express twelve inch trip block oil reservoir cross head and hook. Ship today by freight two only twenty-four inch Hercules logging jacks number two. One only number three."

"Q. You have a record in your office which shows where you sold those blocks?

"A. Where we sold them?

"Q. Yes.

"A. To whom they were sold, you mean?

"Q. Yes.

"A. Yes.

"Q. We will ask you to produce the record during this trial showing to whom this block was sold and when it was sold, which was ordered pursuant to telegram, Complainant's Exhibit 11."

(*Transcript of Testimony, pages* 105, 106 *and* 107.)

On April 27th, 1911, I wrote to complainant as follows:

"Willapa Harbor Iron Works,
South Bend, Washington.
Gentlemen:

Please advise what sizes of your new trip line block you are now making, together with prices on same. If not ready, how soon will they be? Furthermore, will you be agreeable to give us exclusive sale of these blocks in Oregon and Southern Washington? If so, at what discount? Should you give us sale of these blocks, we will see to it that proper advertising matter is issued and we will advertise them in the Timberman and endeavor to promote sale in every way possible. We would, however, want a contract for a certain length of time as otherwise it would not pay us to have cuts made and start the advertising campaign.

Awaiting your reply, we are,

Yours very truly,
F. B. Mallory Company.
Manager."

To which complainant replied as follows:

"April 29, 1911.

F. B. Mallory and Co.,
Portland, Oregon.
Gentlemen:

Your esteemed favor of 27th inst. to hand and in reply would say the only sizes of the new Gilchrist self-oiling blocks we have on hand at present are 8-inch, 9-inch and 14-inch; we have only a limited number of these blocks as we are not yet prepared to supply the frame, and it will probably be some time this coming fall before we will be in a position to do so. The reason for this is that we have had considerable trouble in getting suitable castings from the east. The Columbia Steel Company of your city tried, and made a failure of them, but we now have an order for several hundred of these block shells placed with an eastern steel company and if they are satisfactory we will place an order for a car load of the different sizes; we propose making these blocks in sizes from 8-inch trip line blocks to 18-inch head blocks with swivel and hook and with goose neck. All our blocks will be made in future on the self-oiling principle. We have several patents on other blocks and when all are completed, we believe we will have a line of logging tools which will be hard to beat. Our new Hercules log jack No. 3 is being made for us in Milwaukee from a special grade of open hearth steel, and we expect to be able to sell this jack to the trade for $25.00; all parts except the frame are interchangeable with the Hercules No. 2 . In some respects we consider it the better jack of the two.

We are not yet in a position to make terms for

handling these tools, but shall be pleased to take the matter up with you later on.

Thanking you for your courtesy, we are,

Yours respectfully,

WILLAPA HARBOR IRON WORKS.

G

(*Transcript of Testimony, p.* 109 *p.* 110/1.)

My advertisement on page 24 of the 'Timberman' of March, 1914, is the first advertisement of my auto-lubricating block. Said advertisement received in evidence and marked "Plaintiff's Exhibit 12."

Page 24 of the "Timberman" of April, 1914, is my announcement of the manufacture of my auto-lubricating blocks. Said page 24 received in evidence and marked "Plaintiff's Exhibit 13."

Under the old system of ground logging, logs were hauled on the ground, but in later years a high-lead system of logging has been developed whereby the nose of the log is led off the ground by the main line passing through a high-lead logging block hung in a spar tree or a gin pole; at first the blocks were only hung 40 feet above the ground; now some of the larger blocks hang 175 or even 200 feet above the ground; as the nose of the log is lifted, the log clears obstructions and does not dig up the ground.

The sky-line system is a suspension or trolley system like the carry baskets in a department store, whereby the log is picked up bodily and carried clear of the ground. In either the high-lead or sky-line system of logging the high-lead logging blocks are necessary.

In my catalogues where logging blocks are marked

"Patent Applied For," this refers to a design patent.

Page 22 of the "Timberman" of October, 1915, identified by the witness as the advertisement of the defendant and introduced in evidence and marked "Plaintiff's Exhibit 14."

I don't think that this advertisement, Complainant's Exhibit 14, refers specifically to overhead equipment; we manufacture other blocks besides high-lead and sky-line blocks upon which we have some mechanical patents. This is a general advertisement. One of my sky-line blocks introduced in evidence here is a part of Diamond "M" overhead equipment.

Stipulated that advertisement of the Willapa Harbor Iron Works as shown on page 32 of the "Timberman" of July, 1912, ran from January to July, 1912, and such advertisement was introduced in evidence and marked "Complainant's Exhibit 15."

Stipulated that the advertisement of the Willapa Harbor Iron Works as shown on page .... of the "Timberman" dated March, 1914, ran from March, 1914, to January, 1916, inclusive, and such advertisement was introduced in evidence and marked "Complainant's Exhibit 16."

UPON RE-DIRECT EXAMINATION:

This aluminum block No. 19 is an exact duplicate and representation of our regular No. 19 trip-line or haul-back block, and this aluminum block No. 49 is exactly the same in construction as our No. 49 introduced here as our Exhibit No. 6. Said alumi-

num patents were introduced in evidence and marked "Defendant's Exhibits 'X' and 'Y,' " respectively.

I made the application for design patent upon these blocks because a designed patent is very inexpensive and it was the design we wanted to protect more than anything else; I did not think that there was any mechanical function to be patented nor anything new about these blocks; we are still operating under design patents.

Witness identifies the design patent No. 45,911, issued to F. B. Mallory upon June 9, 1914, as the patent under which he makes his line guard, and the same was introduced in evidence and marked "Defendant's Exhibit Z."

UPON RE-CROSS EXAMINATION:

In the latter part of 1914, possibly in September or October, I first took up with my attorneys the question of the patentability of the auto-lubricating blocks.

TESTIMONY OF WILLIAM J. BAKER, called as a witness on behalf of the defendant:

My occupation is that of commercial artist, having been engaged in that business for about 20 years, and in connection with that business I have been called upon from time to time to make drawings of mechanical devices as well as drawings from pictures and patents; I was employed by the defendant to make drawings of patents for publications and

I made a drawing of the device shown in the Gilchrist Patent No. 977,613; the drawings introduced in evidence and marked "Defendant's Exhibit AA."

Witness likewise testifies that he made a drawing of the Morgan Patent No. 712-1893, and the same was introduced in evidence and marked "Defendant's Exhibit BB." With reference to Defendant's Exhibit "BB" witness admits that he does not show the oil cup as being riveted on the block side.

Witness identifies drawing from Labadie Patent No. 513,067, and such drawing is introduced in evidence and marked "Defendant's Exhibit CC." Witness identifies his drawing for reproduction of figure 3 of the Labadie Patent, admitting that he had broken away the parts as shown in the original in order to more clearly disclose the oiling system, and such drawing was introduced in evidence and marked "Defendant's Exhibit DD."

Witness identifies his drawing from the Ludford Patent No. 844,159 and the same was introduced in evidence and marked "Defendant's Exhibit EE." Witness identifies his drawing of the side shown in figure 1 of the Labadie Patent with a portion thereof broken away, and the same was introduced in evidence and marked "Defendant's Exhibit FF." Witness identifies his drawing of the cut shown in the January, 1908, "Timberman," and the same was introduced in evidence and marked "Defendant's Exhibit GG."

UPON CROSS EXAMINATION:

I have never seen the original block from which Defendant's Exhibit "GG" is drawn, and the changes in the drawing from the original are a result of the change in the position from which the drawing was made; I assume the cross section was as represented by my drawing, although I had never seen the original block.

Referring to Defendant's Exhibit "FF," I never saw the original block.

Referring to figure 2 of the Morgan Patent of Defendant's Exhibit "BB," I admit that the illustration in figure 2 of the Morgan Patent shows that the plate forming the oil cup is riveted on the side of the pulley block, while such feature of riveting is not shown on Defendant's Exhibit "BB."

> "MR. McCARTHY: In response to counsel's request for the letter with reference to taking this matter up with the patent attorneys in Washington, D. C., I have the letter here dated July 7, 1914."
>
> (*Transcript of Evidence, page* 130.)

TESTIMONY OF C. B. BORQUIST, called as a witness on behalf of the defendant:

I am a resident of Portland, Oregon, occupation—machinist since 1903; have been a partner in Borquist Brothers Manufacturing Company, who were engaged in the manufacture of logging blocks for nine years in Portland; have not been engaged in manufacturing logging blocks since 1912; began making logging blocks in 1903; I made a logging

block with a long bearing, long pin and long hub since 1903; the long pin came in a couple of years later, about 1905 or 1906; as long as I was in business it was common custom to drill a hole in the end of the pin with a cross drilling from the center of the pin to the bearing surface of the pin; my brother and I got out a patent on an oiling device evidenced by United States Letters Patent No. 760,378.

Said United States Letters Patent No. 760,378 were introduced in evidence and marked "Defendant's Exhibit HH."

I am familiar with the construction of a logging block with an oil reservoir elbow similar to Defendant's Exhibit "C," and we manufactured a few of that character with an axial opening through the pin carrying the oil by a cross-drilled hole to the bearing surface; we manufactured blocks with an oiling system of this character as far back as 1906 or 1907; am not familiar with an extension or barrel on the elbow as evidenced by Defendant's Exhibit "D"; have manufactured block sides, with annular recesses so as to give a long hub or bearing place, since 1905 or 1906, and I designed and made a 16-inch over-head trip-line block of that description; these different makes of blocks were sold on the open market and used in the logging camps in this section of the country; this type of logging block with a shouldered pin and the elbow oil reservoir, hole in the pin, recesses in the sides, and hubs extending into the recesses, were not common at first but after I

got mine out, became very common during the latter part of 1907; the shouldered pin similar to Defendant's Exhibit "E" was a common method of construction since 1903; the Bouse block came on a few years later.

UPON CROSS EXAMINATION:

My patent of May 17, 1904, had no reference to long or short bearings and did not show in combination an interior oil chamber in one of the sides of the block; none of the blocks to which I have referred had an interior oil chamber in the side of the block; they all worked with hard grease or heavy oil.

UPON RE-DIRECT EXAMINATION:

Heavy oil was used in the elbow reservoir when I was in business.

TESTIMONY OF JAMES J. GEARY, called as a witness on behalf of the defendant:

My residence is at Klatskanie, Oregon, occupation blacksmithing since 1888 with particular reference to the construction of logging blocks; made logging blocks off and on since 1888 and have had practical experience as a logger in the woods and as a logger's blacksmith. I have seen the logging block shown in Defendant's Exhibit "M," and know its construction; don't know as I saw it as early as January, 1908, but along about 1908, 1909 or 1910, somewhere in there. I recall the dust-proof feature, the recesses in the sides in which the long hub fitted, an oil

chamber in the center of the pin, and the hole leading from the oil chamber to the bearing surface of the pin.

"MR. CARY: I would like to assist in saving a little time if we could; undoubtedly they are old in the art, long pin and long sheaves, and annular recesses in the sides of the blocks are old.

"MR. McCARTHY: If counsel will stipulate that blocks with long bearing pins, annular recesses in the sides, in which the hubs fit, with an oil chamber extending through to the bearing surface of the pin, it will save considerable time in connection with this matter.

"MR. CARY: We admit, of course. You can find these old elements in the prior art.

"COURT: You admit they were in use prior to your invention?

"MR. PECK: We admit the separate features but don't admit the combination feature, those you have named. We don't admit any oil chamber in the side, or the cheek, before that."

(*Transcript of Testimony, pages* 138 *and* 139.)

The placing of a connecting member between the two spanners of the line guard so as to form the letter "H" is a matter which would suggest itself to me as a mere matter of convenience in the making of these parts for assembling; I am familiar with the style of block and oiling system as shown in Defendant's Exhibit "C," and have made several such blocks; have known the elbow oil cup since 1903; blocks similar to Exhibit "C" were used to some extent, not by everybody but in several camps that

I know of; have made blocks with the extensions on the elbow similar to Defendant's Exhibit "D"; we filled the extension with waste and used heavy machine oil; the purpose of adding the extension was to make more oil capacity; I made blocks of this character since 1903; it was quite common to hang a block up and put one of these extensions on, fill it with waste and oil, and there it was supposed to hang up, off the ground, as side blocks.

UPON CROSS EXAMINATION:

"Q. Any of these blocks which you have described, was the oil chamber contained in the side of the pulley? Was it an interior oil chamber in the side of the pulley?

"A. No."

UPON RE-DIRECT EXAMINATION:

A logging block of the type of Defendant's Exhibit "D" is as practicable as any other style of block for the purpose of furnishing lubrication for the bearing as long as the reservoir remains in shape; the reservoir does not often get knocked off.

UPON RE-CROSS EXAMINATION:

The block with the extension elbow could be used as a trip-line block; it could not be used as a head block; this extension elbow block would not be a modern block for use in modern logging; there was no interior oil chamber in the side of the block in Defendant's Exhibit "M."

TESTIMONY OF F. B. MALLORY, recalled as a witness on behalf of the defendant:

"Q. Mr. Mallory, this forenoon counsel for the plaintiff requested you to furnish certain additional evidence; one was with reference to an order for the Gilchrist block and what became of it, I believe; have you that information now?

"A. I have, yes.

"Q. Please state.

"A. In our catalogue No. 5 we illustrate some Gilchrist blocks from some cuts that he had furnished us or authorized us at that time, and in an order received from the Pelican Bay Lumber Company under their date of October 28, 1913, we received an order for a trip-line block figure 410 No. 413, 12 by 1 1-4 sheave, which corresponds with catalogue number and figure number we use for the Gilchrist block; that order was written up and all of it was shipped the 1st of October, with the exception of the block; the block evidently having been ordered from the Willapa Harbor Iron Works by telegram that day, and showing shipment to the Pelican Bay Lumber Company under invoice dated November 5 as a back order.

"Q. Now, is that the block which was referred to in order which you sent to Gilchrist which has been referred to in testimony this morning?

"A. It was.

"Q. Who was sold the block?

"A. Sold to Pelican Bay Lumber Company, Klamath Falls, Oregon.

"Q. And shipped within what time after the receipt of the block?

"A. Shipped within a day or so; probably the same day the block arrived. The orders are here, and the orignial request from the Pelican Bay Lumber Company.

MR. McCARTHY: We don't care to destroy our records, but are willing to substitute a copy.

"Q. Have you a copy of this?

"A. I have not.

MR. McCARTHY: We are willing for you to examine this and will substitute copies if you wish them.

MR. PECK: We don't care anything about it.

"Q. What else was it?

"A. They wanted to know about an order we sold last week for an extension reservoir.

"Q. Oh, yes, have you a copy of that order with you?

"A. Yes. Sold to Pullian and Rice, Klatskanie, Oregon, one only number 74 Mallory Loading Block with 8-inch pipe extension. There is the order date of the duplicate.

"Q. Was that the same block which is represented here on defendant's Exhibit D?

"A. No, that is not the same block; it is a block that is made with a larger sheave for loading purposes, but the oil cup that was employed on this block is the same in design as the one in that exhibit.

"Q. And the extension pipe?
"A. The extension pipe.
(*Transcript of Testimony, pages* 144-5.)

UPON CROSS EXAMINATION:

I had the drawings of a cross section of the Gilchrist block as shown on page 24 of my catalogue No. 5 in my possession in 1913; they were drawings that had been furnished by Mr. Gilchrist for the purpose of illustrating my catalogue; these drawings show all information connected with the Gilchrist blocks which I could have obtained if I had taken the block down.

TESTIMONY OF CHARLES B. HIRSCHBEUHL, called as a witness on behalf of the defendant:

My occupation is running the machine shop of the Clarke County Iron Works of which I am the principal stockholder; machinist by trade and have had practical experience for 40 years; have been engaged as a machinist in this part of the country for 32 years and have conducted the business of Clarke County Iron Works since 1910, prior to that time, for about two years, was with the Columbia Steel Works; have had experience in the machining of logging blocks since August, 1907; I do the machine work on the logging blocks of the defendant and since 1911 I have done such work. I recall the circumstances of making a logging block for F. B. Mal-

lory with an oil reservoir in the sides, I guess in 1914—might have been the latter part of 1913.

"Q. Did you have any drawings to aid or assist you in the making of that block?

"A. No.

"Q. Will you kindly explain to the court just how that oil reservoir block was developed and from what information you started and how you completed it?

"A. Well, Mr. Mallory, he was anxious to get a block with an oil reservoir side, so he used to come over. Of course, he was a large customer of ours and he always had lots of work done at the shops, so Sunday morning was a convenient time for him to come over and talk matters over, so we were talking over this block one time and he asked me if there couldn't be a way devised without much expense and without too radical a change to make an oil block—an oil side—a block side with an oil reservoir. So it happened that we were walking through the shop and we just noticed this block side here.

"Q. What are you referring to?

"A. This 106 block side.

"Q. Is that a block side of the F. B. Mallory construction?

"A. Yes, sir.

"Q. Is that a regular stock side that was used at that time?

"A. Yes. So whether he suggested or I did, I don't remember, but anyhow, we thought of raising these ribs up, and curving the thing up, and coring a channel in towards the pin so the oil this would con-

tain would flow towards the pin. That is how that came about.

"Q. You referred to raising the ribs that extend from the hub to the lugs at the upper part of the shell?

"A. No, to raise this from here; make it deeper.

"Q. That is what I mean. But in referring to the ribs, you referred to these ribs which extend from the hub to the lugs on the shell?

"A. Yes, sir.

"Q. The idea was to make these ribs deeper?

"A. Yes, sir.

"Q. And cover them over?

"A. Yes, sir.

"Q. So that you formed a reservoir?

"A. Yes, sir.

"Q. Did anybody else aid or assist you in any way to the completion of that work?

"A. No.

"Q. That is all your own planning?

"A. Yes."

(*Transcript of Testimony, pages* 148 *and* 149.)

I thought we were the first to design this style of a block; practically from the beginning I manufactured blocks with an elbow on the end of the pin similar to Defendant's Exhibit "C"; also similar to Defendant's Exhibit "B," but couldn't say just how far back that went.

The development of the Mallory block required no more than ordinary mechanical ability; I do not claim

to be an inventor and have no particular bent along the line of invention any more than any person who runs into difficulties and tries to overcome them.

UPON CROSS EXAMINATION:

MR. CARY: The business relations between you and the Mallory Company have been pretty close, haven't they?

"A. Pretty close.

"Q. Mr. Mallory suggested to you, didn't he, that he wanted a block with an oil reservoir?

"A. Yes, sir.

"Q. You didn't think of it yourself?

"A. No.

"Q. Then you discussed with him ways and means of doing it?

"A. Yes.

"Q. Will you say it wasn't Mr. Mallory who told you how to do it?

"A. Yes, I will say that—

"Q. Did you talk it over together?

"A. Yes; I couldn't say who suggested that way; whether it was him or myself.

"Q. You won't say it was not?

"A. No, I wouldn't say it wasn't."

(*Transcript of Testimony, page* 151.)

I never saw a Gilchrist block side prior to the time I made the first Mallory block side; the first conversation with Mr. Mallory was probably in the fall of 1913; as soon as we talked the matter over and settled

about the way we would proceed, he gave me an order to make a block side and we made the first block side in February, 1914.

The block side referred to by witness Hirschbeuhl was introduced in evidence and marked "Defendant's Exhibit I." Defendant then introduced certain patents which were marked as follows:

United States Letters Patent 8,950, issued to C. H. Platt May 18, 1852. Marked ~~Complainant's~~ Defendant's Exhibit "JJ."

United States Letters Patent 115,248, issued to Henry Smith May 23, 1871. Marked Defendant's Exhibit "KK."

United States Letters Patent 189,773, issued to J. W. Norcross April 17,1877. Marked ~~Complainant's~~ Defendant's Exhibit "LL."

United States Letters Patent 241,703, issued to J. W. Norcross May 17, 1881. Marked ~~Complainant's~~ Defendant's Exhibit MM."

United States Letters Patent 304,103, issued to J. B. F. Herreshoff August 26, 1884. Marked ~~Complaintiff's~~ Defendant's Exhibit "NN."

United States Letters Patent 390,341, issued to A. E. Brown October 2, 1888. Marked ~~Complainant's~~ Exhibit "OO."

United States Letters Patent 492,550, issued to T. R. Farrell February 28, 1893. Marked ~~Complainant's~~ Defendant's Exhibit "PP."

United States Letters Patent 513,067, issued to J. R. Labadie January 16, 1894. Marked ~~Complainant's~~ Defendant's Exhibit "QQ."

United States Letters Patent 520,973, issued to E. M. Tousley June 5, 1894. Marked ~~Complainant's~~ Defendant's Exhibit "RR."

United States Letters Patent 610,172, issued to I. M. Dotson September 6, 1898. Marked ~~Complainant's~~ Defendant's Exhibit "SS."

United States Letters Patent 644,729, issued to W. W. Bouse March 6, 1900. Marked ~~Complainant's~~ Defendant's Exhibit "TT."

United States Letters Patent 699,518, issued to E. B. Hammond May 6,1902. Marked ~~Complainant's~~ Defendant's Exhibit "UU."

United States Letters Patent 760,944, issued to G. Agobian May 24, 1904. Marked ~~Complainant's~~ Defendant's Exhibit "VV."

United States Letters Patent 765,475, issued to J. E. Gilchrist, the complainant in this suit, July 19, 1904. Marked ~~Complainant's~~ Defendant's Exhibit "WW."

United States Letters Patent 769,998, issued to A. D. Foote September 13, 1904. Marked ~~Complainant's~~ Defendant's Exhibit "XX."

United States Letters Patent 779,437, issued to G. Nettle January 10, 1905. Marked ~~Complainant's~~ Defendant's Exhibit "YY."

United States Letters Patent 780,280, issued to Herbert Gilley January 17, 1905. Marked ~~Complainant's~~ Defendant's Exhibit "ZZ."

United States Letters Patent 786,790, issued to G. W. King, H. J. Barnhart, and C. D. King April 4, 1905. Marked ~~Complainant's~~ Defendant's Exhibit "3A."

United States Letters Patent 806,562, issued to Andrew Opesal December 5, 1905. Marked ~~Complainant's~~ Defendant's Exhibit "3B."

United States Letters Patent 823,231, issued to A. B. Tarbox June 12, 1906. Marked ~~Complainant's~~ Defendant's Exhibit "3C."

United States Letters Patent 844,159, issued to Enoch Ludford February 12, 1907. Marked ~~Complainant's~~ Defendant's Exhibit "3D."

United States Letters Patent 845,041, issued to Andrew Opesal February 19, 1907. Marked ~~Complainant's~~ Defendant's Exhibit "3E."

United States Letters Patent 847,955, issued to J. N. Lindsay March 19, 1907. Marked ~~Complainant's~~ Defendant's Exhibit "3F."

United States Letters Patent 869,422, issued to William H. Corbett October 29, 1907. Marked ~~Complainant's~~ Defendant's Exhibit "3G."

United States Letters Patent 876,176, issued to Bennett W. Hammond January 7, 1908. Marked ~~Complainant's~~ Defendant's Exhibit "3H."

United States Letters Patent No. 880,805, issued to James Mattson March 3, 1908. Marked ~~Complainant's~~ Defendant's Exhibit "3I."

United States Letters Patent No. 898,121, issued to H. J. Littler September 8, 1908. Marked ~~Complainant's~~ Defendant's Exhibit "3J."

United States Letters Patent 942,274, issued to E. Martin December 7, 1909. Marked ~~Complainant's~~ Defendant's Exhibit "3K."

United States Letters Patent 964,284, issued to J. A. Lockfaw July 12, 1910. Marked ~~Complainant's~~ Defendant's Exhibit "3L."

United States Letters Patent 973,177, issued to S. J. and P. W. Davis and C. McCready October 18, 1910. Marked ~~Complainant's~~ Defendant's Exhibit "3M."

United States Letters Patent 984,141, issued to J. T. Johnson February 14, 1911. Marked ~~Complainant's~~ Defendant's Exhibit "3N."

British Patent No. 712—1893—issued to David John Morgan and William Guy Nixon. Marked ~~Complainant's~~ Defendant's Exhibit "3-O."

British Letters Patent 5657—1896—issued to Jens Christian Wurtzen Kjelgaard. Marked ~~Complainant's~~ Defendant's Exhibit "3P."

British Letters Patent No. 4127—1901—Series, issued to Thomas Reed Dyne. Marked ~~Complainant's~~ Defendant's Exhibit "3Q."

TESTIMONY OF HENRY L. REYNOLDS, called as a witness on behalf of the defendant:

My residence is Seattle, Washington, occupation, patent attorney and patent expert; established an office in Seattle in 1891 as patent attorney and have practiced there since, except for a period of eight years when I was engaged in practice as a patent attorney in New York City, being associated with Munn and Company and with Gifford and Bull; graduated from the University of Illinois in a course of mechanical engineering; then for a period of one and one-half years was employed as draftsman and designer in shops in the East; then received appointment as Assistant Examiner in the United States Patent Office at Washington, D. C., holding such position for two and one-half to three years, being assigned to the division of the Patent Office handling patents of a mechanical nature.

Referring to Claim 1 of Gilchrist Patent No. 977,-613, I would first call attention to the British Patent to Morgan of January 12, 1893, No. 712.

"A. In comparing Morgan's patent with the terms of claim 1 of the Gilchrist patent 977,613 I find every element of the claim in the Morgan patent in a similar type of construction, working and functioning in a similar way to secure a similar if not identical result. In fact, the resemblance between the two is unusually near and apt.

Q. Now, I will ask you, Mr. Reynolds, from your experience in the patent office, what you would say

would have been done as to claim No. 1, had the Morgan patent been called to the attention of the Patent Office or the Examiner?

MR. CARY: We have file wrapper showing just what was done in the Patent Office.

COURT: That would be the best evidence.

MR. McCARTHY: The file wrapper doesn't show. You don't claim it shows the Morgan Patent cited?

MR. CARY: It shows what the Patent Office did, and if the Patent Office looked over the prior patents and came to the conclusion the Morgan was not an anticipation, it wouldn't cite it and it wasn't cited.

Q. Is such the case, Mr. Reynolds?

A. If they had seen it, they would probably have cited it. It happens often that they overlook things of that sort. The examiners in the Patent Office are human. They miss things at times, and I have known lots of cases where references existed in the Patent Office and were not found by the examiners at the time of handling the case, and which later have developed and have been sufficient to annul the patent.

Q. Can you conceive of such a claim as claim I of the Gilchrist patent having been allowed, if the Patent Office's attention had been directed to the Morgan Patent?

MR. PECK: Objected to as incompetent, irrelevant and immaterial.

COURT: I don't think his opinion as to what the Patent Office would do or would not do is a circumstance.

MR. CARY: The Patent office records show what it did.

MR. McCARTHY: It doesn't show the Morgan Patent.

COURT: You might just as well inquire what the Supreme Court would have done had certain evidence been presented. What we want to know is whether or not this is a patentable invention.

(*Transcript of Testimony, pages* 163-164.)

UPON CROSS EXAMINATION:

The interior oil chamber of the Morgan patent is indicated by the figure "J" prime, and is formed by riveting on a plate which has been cupped and flanged out; the oil cup of the Morgan patent is integral with the side in that it is fixed and not removable, although riveted to the side; would be practical construction if a tight joint is secured.

"Q. Is that suitable to modern logging? Would that last in the woods today? A flimsy structure of that kind?

"A. I don't wish to try to qualify as an expert in logging matters and I think I had better not pass on that question."

I can make a block of the type of the Morgan block which would be successful in the woods.

UPON RE-DIRECT EXAMINATION:

Steam boilers are riveted and subjected to a pressure of 600 pounds; the Morgan patent describes the construction of the oil cup, and under the usual license given any inventor he could make that an integral cast construction if he saw fit and still be the

same thing from the standpoint of a patent; the side of the Gilchrist patent would fall within the claims as described in the Morgan patent; the construction would also fall within the terms of the claim of the Gilchrist patent as well; from a patent standpoint the construction of either the Gilchrist Block or the Morgan Block could be read into the claims of either the Gilchrist patent or the Morgan patent and from a patent standpoint the two are the same."

I have considered the Ludford patent No. 844,159, and I find that one of the sides of the pulley block described in the Ludford patent is provided with an interior oil chamber having an inlet near the top as expressed in the Gilchrist patent; the Ludford patent also has a bearing pin terminally mounted in the side but this bearing pin has no axial opening communicating with the chamber and extending through the side wall of the pin; it has been pointed out that the interior oil chamber of the Morgan patent is formed by an attached plate. The Ludford patent shows a similar chamber for a similar purpose located in a similar place but integrally cast, and in view of the state of the art as shown by Ludford there would be no invention in the use of the Ludford type of construction in making the oil chambers of the Morgan block. It is there suggested—part of the prior art to which everybody has access.

UPON RE-CROSS EXAMINATION:

The Ludford patent does not show an axial bore in the shaft nor a sheave rotating on a pin; the pin

rotates on a sheave with two borings on each side and to that extent it does not operate in the same way as the Gilchrist pulley block.

UPON RE-DIRECT EXAMINATION:

Defendant's Exhibit "FF" correctly shows the construction under the Ludford patent.

The Labadie patent No. 513,067 is of a trolley wheel and a manner of oiling the same.

"A. In explanation of this I would say that there is what is known as a harp on the trolley wheel, meaning a yoke, or the two arms between which the wheel is mounted, represented by the reference character A, and as shown in the drawing, these are made hollow so as to serve as an oil chamber; there is a small chamber, E, located in the head of this harp, so that when the trolley is in working position it will be above the pin upon which it turns. This small chamber communicates with the large chamber, D, by a small passage, a. The small chamber communicates with the pin receiving bearing by a small passage, e. The trolley axle is shown in figure 1 as being bored axially and then crosswise, so as to distribute the oil to the trolley wheel. The ends of this pin, H, of the Labadie patent are screwed into the sides of the harp. These sides correspond to the side pieces of a sheave wheel—of a block. Now, in applying claim 1 of the Gilchrist patent, 977,613, to this: This claim reads 'a pulley block consisting of sides.' These are found in the Labadie patent, consisting of two parts, AA. 'One of which is provided with interior oil chamber.'

Both of the sides of the Labadie patent are provided with interior oil chambers. Also they have an inlet adjacent to the top of the block. The filling inlet in the Labadie patent is the inlet i.

"Q. See that cap on that inlet?

"A. I think it is intended for O; is evidently used to close that. There is a bearing pin terminally mounted in the sides; in fact it is mounted identically in the same way as in the Gilchrist patent, that is, by screwing into the sides. It also has an axial opening communicating with the chamber and extending through the side wall of the pin, that is by the cross bores. There is also a sheave journaled for rotation upon the pin between the sides. In other words I find in the Labadie patent every element of claim 1 of the Gilchrist patent, the construction being very closely resembling to it and in some cases identical. The parts operate in the same way and they secure the same results."

(*Transcript of Testimony, pages* 172 *and* 173.)

UPON CROSS EXAMINATION:

The pin does not connect directly with the chamber as specified in the Gilchrist patent, but is connected indirectly; the oil feeds automatically to the bearing in a manner that is identical to that in Gilchrist; the Labadie patent specifies two chambers. The oil flows from the large chamber into the small chamber only when the trolley is pulled down at the end of the line, at which time it is presumed that a sufficient quantity of oil will flow into the smaller

chamber to supply the trolley well for the ensuing trip; I don't say that this is a suitable combination for a logging block; I said that I found all the elements of the Gilchrist patent in the Labadie device;

"Q. Well, the bearing pin terminally mounted in the sides does not penetrate the wall of the oil chamber, does it?

"A. It has a direct connection with it.

"Q. That is an additional element then; it doesn't connect directly with the oil reservoir?

"A. Well, yes, that opening e is an extension of the chamber E. There is nothing to restrain the flow of oil between the two.

"Q. How many oil chambers has that combination got?

"A. There are two oil chambers in each side.

"Q. And the pin connecting directly with either of them?

"A. Yes, through the bore e.

"Q. Through an additional duct then?

"A. Well, that is nothing but an extension of the other chamber.

"Q. That is all; that is an additional element?

"A. No, I wouldn't say an additional element by any means. It is an extension of the oil chamber.

"Q. There are three oil chambers; that is the point I want to bring out.

(*Transcript of Testimony, pages* 174-5.)

UPON RE-DIRECT EXAMINATION:

Referring to page 2 of the specifications of the Labadie patent, lines 4 to 8 inclusive, I find that the construction resembles even more closely the Gilcrist construction, in the construction there provided for the use of a single oil chamber in each side.

In the Tousley patent No. 520,973 the oil reservoir is in the wheel instead of in the sides; side pieces of the frame are shown as slightly cupped and fitting snugly over the bosses or central hubs of the well in a manner which very closely resembles that shown in the Mallory sheaves.

UPON CROSS EXAMINATION:

In the Tousley patent there is no interior oil chamber nor axial opening in the pin; the pin is screwed into the side by threading in exactly the form of the Gilchrist and others.

UPON RE-DIRECT EXAMINATION:

In the Bouse patent No. 644,729, the oil reservoir is in the pin connected with the surface of the pin by radial bores; the pin is shouldered and threads into the sides, the sheave turns on the pin and the piston with a spring forces the lubrication to the bearing.

UPON CROSS EXAMINATION:

The Bouse block contains no interior reservoir in the cheek or side of the pulley unless you consider the pin an extension of the cheek, and I would hardly say that.

UPON RE-DIRECT EXAMINATION:

The Barnhart and King patent No. 756,790, is of a construction closely resembling the Bouse block last described.

The pertinence of Lindsay Patent No. 847,955 seems to be limited to the construction of the pin, which is shouldered at each end and threaded to screw into the sides; the oil reservoir of the sort designed in Gilchrist's claim 1 is not to be found in the Lindsay patent; there is an oil duct or channel which is of limited capacity in the sides communicating with the pin, which is an interior oil chamber of very limited capacity.

UPON CROSS EXAMINATION:

The function of this duct is to conduct the oil from the oil can to the end of the pin sheave.

UPON RE-DIRECT EXAMINATION:

Lockfaw patent No. 964,284 has an oil chamber in each side and has all the elements of claim 1 of the Gilchrist patent, combined in the same way with constructions which are equivalent from a mechanical standpoint to operate in the same way and secure the same result; changing the proportion of the elements of the claim is the privilege of the patentee at any time without departing from the protection given by the claims.

UPON CROSS EXAMINATION:

Whether the Lockfaw reservoir was designed to hold oil, it will accomplish that purpose, the size of the reservoir being only a question of degree; the purpose without doubt was to provide a storage capacity enough to supply oil for some little time."

UPON RE-DIRECT EXAMINATION:

"Q. Now, will you compare claim 4 with the Morgan patent and state which of the elements of claim 4 are met by the Morgan patent?

"A. Well, the first element, namely, the parallel sides are found in the Morgan patent. So far as the annular recesses in their adjacent faces, they are not found in the Morgan patent. The inner faces—

"Q. Now, before proceeding further, Mr. Reynolds, and taking up the annular recesses in the sides: In view of the previous condition of the art as shown by the exhibits and files here, what would you say as to the date of the earliest annular recesses in the sides?

MR. CARY: One minute—he is taking them up separately; this is a combination claim; we have already admitted that is old.

COURT: You have admitted pulleys were made prior to the patent.

MR. CARY: He should take the picture of the whole combination which is a separate and patentable thing.

COURT: If it involves invention.

MR. McCARTHY: The question is, whether it is a combination or an aggregation; if it is a mere aggregation, why, it is not entitled to the dignity of a patent.

MR. CARY: Good enough for him to copy, and copy extensively.

MR. McCARTHY: I think that should be stricken from the records.

COURT: I think it should be stricken; he had a right to copy it if it was not patentable.

MR. McCARTHY: Now, probably we can save time by going through these different elements and seeing how far these are admitted again.

MR. CARY: I think you had better proceed with the examination.

MR. McCARTHY: I might be able to shorten it; are you will to admit that pulley blocks consisting of parallel sides having annular recesses in their adjacent faces are old?

MR. CARY: We admit that.

MR. McCARTHY: Existed in the prior art prior to the application of Gilchrist; and in view of the Morgan patent, what will you say with reference to the block having a chamber with an inlet adjacent to the top?

MR. CARY: Let him compare the Morgan patent and the Gilchrist claim.

MR. McCARTHY: You said you admitted some of this; I wanted to see if you admitted it all.

MR. PECK: We haven't admitted the oil chamber is old in the art.

MR. McCARTHY: Not even now.

MR. PECK: No, sir; absolutely not.

"Q. I will ask you then to proceed with the comparison, Mr. Reynolds.

"A. As I have said, the Morgan patent does not have the recesses in the sides of the faces similar to the recesses that are named in claim 4 of the Gilchrist. It does have, however, the next element, which is one of the sides being provided with an interior oil chamber, and this oil chamber has an inlet adjacent to the top of the block. It also has the next element, a bearing pin terminally threaded to engage the sides in the recessed portion thereof. This pin also has an axial opening communicating with the chamber and extending through the side wall of the pin. There is also the next element, namely, a sheave journaled for rotation upon the pin, and having oppositely disposed bosses. However, they do not fit anti-frictionally in the recesses, because there are no recesses there. The pin, however, has shoulders to engage the sides to prevent the same from binding upon the sheave. It does have a top removably connecting the sides above the sheave.

"Q. By referring to the specifications of the Gilchrist patent, what do the specifications indicate are the purposes of the annular recesses in the sides? And the sheave with the hubs fitting closely, but anti-frictionally therein? With shoulders on?

"A. To keep dirt and dust away from the bearings.

"Q. I will now call your attention to the Morgan patent, and direct your attention especially to the

washer and felt shown upon the axle of the Morgan patent?

"A. There is a ring of felt which is retained by a washer at each side of the sheave; the purpose of this is to hold the oil in and prevent the dirt from getting in.

"Q. Does that act for the same,—perform the same function as shoulders in the Gilchrist patent?

"A. Its purpose is the same and it acts in the same manner. The appearance of the construction, however, is a little different.

"Q. And it is provided with means to prevent the binding of the sides upon the sheaves, is it not?

"A. Yes, one end of the pin is threaded and screws into one of the sides. The other end of the pin is provided with a head making of it a bolt. This head is outside of the other side. It is, however, secured against movement lengthwise of the pin, which is the function of the threading and shouldering of the other pin, by means of cap D, which is secured over the head and binds down upon it thus preventing movement of the pin lengthwise of itself, and preventing the two sides of the sheave from moving towards each other.

"Q. Does this form the mechanical equivalent of the thread and shoulder on the pin in the Gilchrist patent?

"A. I would say it formed a full mechanical equivalent. It was common in this art to provide pins of this character with a shoulder and a nut on

the outside so as to clamp the sides between the nut and the shoulder. Another equivalent.

"Q. And in the Morgan patent, has it a top removably connected with the sides?

"A. It has a top but the connection with the sides in the Morgan patent does not contemplate ready removal or disconnection. In other words, it is by a rivet instead of by a pin which is easily removable.

"Q. Does the matter of a top removably connected with the sides in any way affect the function of the oil chamber or the communication of the oil to the axle?

"A. The function of the top being removable is something which is entirely foreign to the function of lubricating the sheave, in other words, there is absolutely no connection between the two, of such a manner as is considered in the patent. In other words, the lubricating mechanism described might be used with or without the top, or with a top whether easily disconnected or fixed. And similarly, a top can be used of that type whether or not any lubrication or whatever kind of lubrication. In other words, I would say that claim was an aggregation and not a combination."

(*Transcript of Testimony, pages* 184-9.)

UPON CROSS EXAMINATION:

The Morgan patent has the equivalent of a bearing pin terminally threaded at both ends; strictly speaking, the pin of the Morgan patent has no shoul-

ders, but it has threads which are in themselves shoulders; the only shoulder of a Morgan pin is the shoulder formed by the threads; such shoulder performs the same function as the shoulder of the Gilchrist claim; there is no shoulder on the Morgan pin except the shoulder formed by the threads, which is the mechanical equivalent of the Gilchrist shoulder; the Morgan patent has no hinge connecting the top such as is described in the Gilchrist construction.

UPON RE-DIRECT EXAMINATION:

I see no connection whatever between the flow of oil and the top of the sheave, nor between the flow of oil and the shoulder on the axial pin, nor between the flow of oil and the annular recesses of the sides of the block.

Labadie patent No. 513,067 contains all the elements of claim 4 of Gilchrist No. 977,613, except the removable top.

UPON CROSS EXAMINATION:

The annular recesses specified in claim 4 Gilchrist are formed in the Labadie patent by the flanges "m," which extend at right angles outwardly from the inner wall of the side; the recess of the Labadie and Gilchrist patents are identical in function and purpose; the Labadie recess does not enable one to get a longer hub nor do I regard that the recess of the Gilchrist patent enables one to make any longer hub or any longer pin; the removable top of the Labadie patent is the collar "C" which connects the shanks

or ends of the sides and is not the same construction as Gilchrist, but it does connect the sides together and forms the means by which the device as a whole is connected with the object by which it is supported. The top "C" of Labadie serves to hold the two sides in fixed relation to each other, and I don't suppose it would be pratical to use that construction in a logging block—it would have to be designed differently.

UPON RE-DIRECT EXAMINATION:

Patent No. 115,248 issued to Henry Smith, May 23, 1871, specifies a pulley block consisting of sides with an oil reservoir in a sheave, bearing pin terminally mounted in the sides, a solid pin and a sheave journaled for rotation upon the pin.

UPON CROSS EXAMINATION:

There is no interior oil chamber in the side nor axial opening in the pin communicating with the chamber.

UPON RE-DIRECT EXAMINATION:

Patent No. 390,341, issued to A. E. Brown October 2, 1888, shows the development of the art of lubricating the pin and of protecting it from dirt. It has an oil reservoir located in the sides of the pin in a position co-axial with the axis, outside of the ends of the pin in the shell forming the side of the sheave; the pin is not bored for oil passages.

UPON CROSS EXAMINATION:

The oil chamber is in a part of the sheave, in the hub part; the reservoir is a grease cup in which oil could be used; the pin has no axial opening for a passage of grease or oil.

UPON RE-DIRECT EXAMINATION:

The Bouse patent No. 644,729 meets the elements of claim 1 of Gilchrist, except that the oil reservoir is not in the side but is in the enlarged axial bore of the pin.

UPON CROSS EXAMINATION:

The Bouse pin has shoulders and threads the same as the Gilchrist, and is different only that the central axial bore has been enlarged for use as a reservoir.

UPON DIRECT EXAMINATION:

The Gilchrist patent No. 765,475, issued to the complainant in 1904, has an oil reservoir and a sheave; meets the elements of claim 1 of Gilchrist No. 977,-613 as to the shouldered pin, as to parallel sides and as to a sheave journaled for rotation upon the pin between the sides.

UPON CROSS EXAMINATION:

I don't consider that Gilchrist No. 765,475 of 1904 meets fully the terms of the claims as a combination of Gilchrist No. 977,613.

UPON RE-DIRECT EXAMINATION:

The patent to Gilley No. 780,280 is a slightly different type of construction; it discloses oil reservoirs or chambers in each of the sides; the opening of the Gilley chamber is at the upper side of the chamber; the Gilley chamber is shown as being either integral with or attached to the side, the bearing pins being terminally mounted in the side; the bearing pin has no axial opening communicating with the chamber; the Gilley patent shows the attached chamber and the integral chamber as being interchangeable and equivalent in construction.

Looking at the patent drawings of Gilchrist No. 977,613, the oil chamber is shown to project beyond the plane of the natural side; looking at complainant's Exhibit "A," the oil chamber appears to be exterior to the plane of the sides; looking at the ribbed section of Complainant's Exhibit 8, it shows two projecting flanges, which if covered by a plate would result in an oil chamber; that plate might be an attached plate as shown in Morgan or it might be formed in the making of casting and if the depth of it was not considered sufficient as it is now, it would be an easy matter to make variations at the sides projecting a little bit more.

Changes in dimension do not amount to an invention; considering line 58 of Gilchrist No. 977,613, would indicate that the construction has been added to the side in order to get space to form a chamber; any mechanic having a block provided with an elbow

grease cup or a block of that kind having an extension which has been referred to as the stove-pipe form, and also a block having the side constructed in accordance with the side of the Gilchrist block just referred to which does not contain the oil reservoir, should be able to devise the type of oil reservoir which has been used and shown by Gilchrist in patent No. 977,613. In other words, the provision of the particular type of construction of oil reservoir shown in this patent is nothing more nor less than mechanical skill in view of the prior art as shown by previous blocks; in fact, the skill required for that would be only ordinary.

UPON CROSS EXAMINATION:

The Gilley patent has no axial opening in the pin and therefore does not with exactness cover all of the elements of claim 1 of Gilchrist; the Gilley oil chamber is the same as the Gilchrist chamber, except that it has not been extended up quite so far and is not closed at the top; nor does the sheave rotate on a pin in the Gilley patent.

"Q. Prior to this case were you familiar with logging equipment and logging blocks? * * *

"A. To a certain extent, yes; for several years while in New York City I had all the patent application work for the Lidgerwood Manufacturing Company and a part of that was in connection with this sort of construction. Also this particular matter of these two Gilchrist patents was called to my attention in connection with the question of infringement

some time ago. I had an investigation made and wrote a report covering the question of infringement, which report was dated April 14, 1919, and it is this report which I now have in my hnd. This was done, not for Mr. Mallory, but for a Seattle firm.

"Q. Yes, several have been getting reports—asking for reports. Whom did you make this report for?

MR. McCARTHY: I object to that; this man does not need to find out what is going on with other people here in this trial.

MR. PECK: May it please the court, we have a right to show this man's interest in the case. This man has been on the stand arguing the case from the time he first went on. We have a right to show he is a retained attorney on behalf of some other parties.

MR. McCARTHY: You can ask the question whether he is a retained attorney if you want to, but you don't need to ask for whom he made the report.

COURT: He can answer the question.

"A. Washington Iron Works.

"Q. The Washington Iron Works manufacture logging blocks?

"A. I believe so.

"Q. Did they ever receive a notice that Gilchrist—

MR. McCARTHY: Objected to as incompetent, irrelevant and immaterial.

"A. I can't state as to that.

COURT: I don't think that is material. It is material to ascertain what connection this witness had with this patent, whether he is here as an absolutely fair and unbiased expert, or

whether he has been retained before by somebody else.

MR. McCARTHY: If your Honor please, the notice sent to the Washington Iron Works and he said he made an investigation for them in regard to this patent.

COURT: I know he said that but there is no evidence why he did.

MR. McCARTHY: No evidence here any notice was sent to the Washington Iron Works. If there is any evidence about it, it is nothing more than the statement of counsel.

"Q. The Washington Iron Works asked you to look up this Gilchrist patent and report on its validity?

"A. Report on whether or not certain constructions were infringements.

"Q. And when you took the stand, of course you had prior conviction as to the validity of this patent?

"A. Whatever conviction I had in the matter was based entirely upon the prior art of which I had knowledge, and was not influenced in any kind of way by any other consideration.

"Q. Wasn't it in the interest of the Washington Iron Works to show that the Gilchrist patent was invalid?

"A. Well, I don't know that I am competent to say as to that. It might have been and it might not.

"Q. They manufacture pulley blocks, don't they, of the same type?

"A. I don't know as to that.

"Q. Did you ever see the block the Washington Iron Works puts out—makes or manufactures?

"A. I don't know that I have ever seen a block put out by the Washington Iron Works. I think possibly I may. I know this, that I have never gone to the plant of the Washington Iron Works to see any block nor have I gone to any other place to see any blocks as having been made by the Washington Iron Works.

"Q. Did you ever go to the Puget Sound Iron & Steel Works to look at the patterns of the Gilchrist block?

"A. No, never did.

"Q. A couple of years ago?

"A. No, never did. I was simply furnished with a sketch and asked to base my search and render an opinion upon that, and that is what was used, and that alone.

"Q. The information that you gather here now will be of great interest and value to your client, the Washington Iron Works, won't it? ?

"A. I don't know as to that; I don't know whether they are making such a block as that or not.

MR. PECK: May it please the court, in order to keep the record straight, I want to offer to show that at the same time that we served notice upon the Mallory Company in preparation for this suit, we also served notice upon the Washington Iron Works, and it was pursuant to that notice that witness was employed to make search.

MR. McCARTHY: It is incompetent and irrelevant and ought not to be in the record at all.

COURT: I don't think that is material."

(*Transcript of Testimony, pages* 227, 228, 229 *and* 230.)

Have had no practical experience with the use of logging blocks, except possibly a few times when I have been about logging camps; have never designed any logging blocks; have never taken out any patents nor made any drawings of logging blocks; as a single patent the best reference meeting claim 1 is the Morgan British Patent No. 712—1893.

UPON RE-DIRECT EXAMINATION:

Kjelgaard British Patent No. 5657—1896, has not all the elements of claim 1 of the Gilchrist patent.

British Patent Dyne No. 41,927—1901, meets all the specifications of claim 1 of the Gilchrist patent.

UPON CROSS EXAMINATION:

The oil chamber is attached to the sides in the Dyne patent the same as in the Morgan patent; I would not care to discuss the practicability of the Dyne patent, that appears for itself.

UPON RE-DIRECT EXAMINATION:

I consider the Morgan reservoir as the absolute mechanical equivalent of the Gilchrist reservoir.

Referring to Gilchrist patent No. 765,475, a removable top, a pin terminally mounted in the sides, a shouldered pin to engage the sides, a lubricating de-

vice whereby lubrication is conducted to the pin, are shown.

UPON CROSS EXAMINATION:

All of the elements of claim 4 of Gilchrist No. 977,613 are not shown in the prior Gilchrist patent No. 765,475; there is no interior oil chamber in the side, nor does the pin have an axial opening communicating with the oil chamber, nor are there recesses in the sides nor bosses on the sheave.

UPON RE-DIRECT EXAMINATION:

Referring to Defendant's Exhibit "M," I find a block with two parallel sides having bosses located outwardly which gives the block a long bearing and a long pin; this block also shows a dust guard or protection of exactly the same character as that shown in the Gilchrist patent; also is shown a removable top; also a bearing pin containing an oil reservoir formed by drilling through the pin with a cross bore from the axial bore to the outer surface of the pin; also a pin terminally mounted in the side with a dust cap projecting over the hub.

UPON CROSS EXAMINATION:

There is no oil chamber in the side.

UPON RE-DIRECT EXAMINATION:

I find in Barnhart and King patent No. 786,790 a pulley block consisting of parallel sides; these sides have no interior oil chamber; it does have a bearing pin terminally threaded to engage the sides in the

recess portions thereof; the sides have recesses similar to the recesses shown in the Gilchrist patent; the pin has an axial opening with a cross bore communicating with the surface of the pin; it also has a sheave journaled for rotation upon the pin with oppositely disposed bosses attached to fit closely but antifrictionally into the recesses; the pin has shoulders engaging the sides to prevent the same from binding the sheave; the block has a top removably connecting the sides above the sheave. The point of diversion from Gilchrist claim 4 and this patent is the location of the oil reservoir which is within the axial bore instead of in the side itself.

UPON CROSS EXAMINATION:

The top of the Barnhart and King block is not hinged in the same way as the Gilchrist top and is not the same identical structure. In order to put the cable in the block, one would have to take the block down or thread the cable through it, while in the Gilchrist block one could take the pin out at one end and let it swing on the other; I do find all the elements in claim 4 of Gilchrist 977,613 in the Barnhart and King Patent 786,790, except the difference as to the oil reservoir.

UPON RE-DIRECT EXAMINATION:

The Opsal patent No. 806,562 contains all the elements of claim 4 of Gilchrist No. 977,613, except the annular recesses in the sides, the interior oil chamber, and a bearing pin terminally mounted in the

sides. In the Opsal patent No. 845,041 I find that the oil arrangement is different than that of Gilchrist in that the Opsal oil chamber is formed in the sleeve or bushing placed in the sheave.

UPON CROSS EXAMINATION:

I do not find all the elements of claim 4 in the Gilchrist patent No. 977,613 in the prior patent to Opsal No. 845,041.

UPON RE-DIRECT EXAMINATION:

In the Hammond patent No. 876,176 I find all of the elements of claim 4 of the Gilchrist patent excepting the feature of placing the oil reservoir in the side of the plates; in view of the oil chamber of the Morgan and Ludford patents it does not appear to me that the addition or change in the Gilchrist patent from the Hammond patent would be such as would involve a new or patentable combination; the placing of an oil reservoir in this way has been shown in the art to be old and the thought of the need for more oil would lead any person familiar with the art to so place a reservoir.

UPON CROSS EXAMINATION:

The Hammond patent No. 876,176 does not disclose all of the elements of the Gilchrist patent No. 977,613.

"Q. To your knowledge there never has been, has there, a combination showing all of the elements of claim No. 4 of Gilchrist, as you have studied the prior

art? Can you point to any patent that shows all of the elements of claim 4? Yes or no.

"A. No. I expect in exact details it has not, but there is that slight difference, such as referred to in connection with the Hammond patent."

(*Transcript of Testimony, page* 251.)

UPON RE-DIRECT EXAMINATION:

The removability of the top as specified in claim 4 of Gilchrist in no way affects the functions of the other elements; if the two sides were made as one integral piece all the other parts would function in the same identical way and obtain the same result and have the same relation.

UPON CROSS EXAMINATION:

If the top were in one piece with the sides, the cable would have to be threaded in, the hinged top has the useful purpose of making the block more convenient and the more practical block for logging purposes, but I don't consider that the removable top affects the functioning of the major part of the elements of the claim; it affects the function of other parts.

UPON RE-DIRECT EXAMINATION:

In the Lockfaw patent No. 964,284 I find all the elements of claim 4 of Gilchrist, except the annular recesses, oppositely disposed bosses on the sheave, and a lack of terminal threading of the bearing pin.

UPON CROSS EXAMINATION:

The top of the Lockfaw block is not hingedly connected as in Gilchrist and a cable would have to be put in either by threading or by removing the head; I do not find all the elements of claim 4 of Gilchrist patent No. 977,613 in the Lockfaw disclosure No. 964,284.

UPON RE-DIRECT EXAMINATION:

In Davis No. 973,177 I find all the elements of Gilchrist patent No. 977,613, except the interior oil chamber in the side, and whatever variation is caused by the fact that the Davis top is made integral with the sides.

UPON CROSS EXAMINATION:

I do not find all the elements of claim 4 of Gilchrist No. 977,613 in the disclosure of Davis and McCredie No. 973,177, the oil reservoirs in the side walls and the removable top being absent.

TESTIMONY OF A. M. CLARK, called as a witness on behalf of the defendant.

My occupation, Northwest Manager of the Columbia Steel Company's plant in Portland, Oregon, since 1904, the Columbia Steel Company being the successor of the Columbia Engineering Works since 1910. The first block constructed under my supervision was the Opsal block shown in Defendant's Exhibit "I"; the annular recess in the side was a part of the casting and the hubs of the sheave extended so as to

fit closely in the recesses, resulting in what we termed a long hub and a long bearing; the block had a removable head or top by taking out a pin; these blocks were manufactured just after I came to the company, probably in 1905; the pin was shouldered and the ends of the pin were threaded and screwed into each side; the plug in the end of the pin shows the oil reservoir, which was the usual practice in making various blocks as long as I can remember; there was also an opening threaded through the pin to permit the oil to get through the pin into the sheave.

We also manufactured the Skookum block shown by Defendant's Exhibit "M," and is the same block which was shown in our catalogues.

Referring to Defendant's Exhibit "GG" the shackle or goose neck at the top was removably connected; the block sides had annular recesses into which the long bearing or the hub projected and fitted; the pins had an axial bore with a cross bore to the bearing surface, were terminally mounted in the sides, and were shouldered; caps were over the end of the pin as a dust or dirt-proof feature; lubrication was furnished the pin from the inside of the pin by a grease cup or oil cup located on the outside of the block in connection with the pin itself; this block was manufactured and placed upon the market at the time of the advertisement; the advertising cut was made from the block and then the blocks were put upon the market; the blocks shown on page 5 of Defendant's Exhibit "B" appear to be identical with the Opsal

block, which we manufactured and sold to Mr. Mallory who handled the same.

We made the block shown on page 8 of Defendant's Exhibit "B" and handled by Mr. Mallory. The imprint on the block indicates "Patent date December 5, 1905"; the block had a long bearing and a removable top, grease cup oiling system through an axial bore of the pin cross-bored to the surface, annular recesses in the sides, and long hub sheaves; this was the second block we made, the first one with a short hub, and was manufactured in 1905; the block had a shouldered pin, threaded pins which were fastened to the block side with a nut.

Referring to figure 100 at the bottom of page 10 of Defendant's Exhibit "B," I would say that this block was manufactured prior to the issuance of the catalogue in 1907, the cut being made from the block; the block had a removable top, long hub bearing annular recesses in the sides, hubs fitting into the recesses, shouldered pin and lubrication from an oil or grease chamber on the outside through an axial hole in the pin with a cross bore to the surface; the deep ribs shown on this block was a common form of construction, it being the idea to make the block as light as possible and still get the necessary strength along the center in these ribs; if one wished to make an oil well integral with the side of the block the most natural thing to do would be to extend a portion of the side sufficiently to allow for an oil cup or an oil reservoir to be put on it sufficiently large

to perform the work which that particular side was to be used for; that could be done, and the easiest way to do it is to put an extension on the side, and core that side out; in other words make a recess in the side of the boss to hold the oil or grease.

UPON CROSS EXAMINATION:

No one of the blocks which I have been describing has an interior oil chamber in the side; they have all been what is known as grease cup or compound blocks, wherein the grease was forced by tightening up the oil cup; the object of the annular recesses is to give a longer, better bearing, a greater bearing area on the pin; the main object of the long pin is to keep it from running hot, to give it a better bearing surface; whether you have a small or large area of bearing surface you need lubrication; many conditions govern the width of the sheave; if you use a small, narrow sheave and spread the sides far apart, the sheave would slop back and forth on the pin and the cable would be liable to bump off and lodge in between the side of the sheave and the side of the pulley block; the design of a sheave has really been evolved as logging increased and as they are using larger engines, larger pins and larger block sides, then larger sheaves have to be used. The first block sides took a 9-inch sheave, while today, due to different methods of logging, sheaves run up to 42 inches, and the size of the pin, the length of the pin and the bearing are made proportionate to the sheave

to withstand the work; the hub of the sheave is made longer than the width of the sheave; there are a number of factors that govern the width of a sheave; a removable top is one that can be taken off, either by withdrawing the pin or by the use of a monkey wrench to remove nuts; if the top were cast as a part of the side, it would not be removable; my definition of that would be, "any head which could be taken off with a hammer or chisel would be removable." To equip Exhibit "I" with the Gilchrist oil chamber rather than with the grease cup oiling device would cost a litttle bit more because the block would be heavier; on the other hand, you would be doing away with the grease cup, but your oil side would cost a little bit more; because of additional metal to form the outside of the oil cup an oil chamber side would be a little heavier than the side without an oil chamber.

The oil chamber construction tends to strengthen the side of the block; have never seen a modern logging block that you had to use a monkey wrench to take the top off, and in order to make a salable block, I imagine that there would have to be some method provided to put the cable into the block; all the castings which we make for block sides provide for a hinged top.

I have financial and business relations with F. B. Mallory Company; I enjoy the business of F. B. Mallory, the Willapa Harbor Iron Works and practically all the other block makers in this territory; I was requested by Mr. Mallory to testify; the

moulding of a block side with an oil chamber would increase the cost of the block from 3 per cent to 5 per cent over the cost of a block with plain sides.

UPON RE-DIRECT EXAMINATION:

The tops of all the blocks which I have referred to in my testimony work with a hinge and pin, so that the shackle, or top, as you call it, can be turned back by the removal of the pin with the fingers.

TESTIMONY OF EDWIN L. TAYLOR, called as a witness on behalf of the defendant.

My occupation is blacksmithing since 1903 in Portland, making all kinds of logging blocks for the past 14 years; have made logging blocks for myself, F. B. Mallory; Hammond Manufacturing Company and other contractors and loggers; was making logging blocks for F. B. Mallory in 1907, and in that year manufactured the blocks shown on page 1 of Defendant's Exhibit "B"; the pin was a two to two and one-quarter inch pin; brass bush sheave; one end of the pin was turned round and the other end turned with a square shoulder and thread for a nut; the oiling device was by way of a grease cup on the end of the pin feeding through an axial hole in the pin, connected by a cross bore to the surface of the pin; sometimes an elbow is used as shown in Defendant's Exhibit "C"; the top would open back removing the cotter in the pin; sometimes we would put on a larger elbow for greater oil storage; the pin was shouldered.

In 1907 I also manufactured for Mr. Mallory a yarding block as figure 60 in the upper left-hand corner of page 3 of Defendant's Exhibit "B"; the pin was threaded on each end and screwed into the side; the pin was shouldered; lubrication was through a hole drilled through the center of the pin longitudinally with a cross-bore to the surface; the reservoir was a fairly large hole, about a half-inch hole with a pipe thread and a plug in the end; the top was a large cross-head with a pin that was removable; one could tip the head back and drop the cable in.

In the year 1907 I manufactured the Geary Yarding block as shown by figure 85 on page 6 of Defendant's Exhibit "B"; Defendant's Exhibit "3-R" is a side of one of the Geary Yarding blocks just referred to; the pins were screwed into the sides; the block had annular recesses in the sides with oppositely disposed bosses on the hub to fit into the recesses and extend into them; lubrication was by a hole drilled in the end of the pin to the center and from the center out to lubricate the bushes.

Geary block side introduced in evidence and marked "Defendant's Exhibit 3-R."

The pin was shouldered, the top was removable, having a rivet on one side, and on the other side there was a link to drop over the lug, on what we call the top side. To remove, just put it back and put in the cable.

In 1907 I manufactured for Mr. Mallory the tripline block shown as figure 88 on page 7 of Defend-

ant's Exhibit "B"; lubrication was by an elbow with a hole drilled through the pin from the side so as to lubricate the bushings; the pin was provided with shoulders fitting up against the sides; the top was removable just the same as the other block.

Defendant's Exhibit "3-S" for identification is a cross-head hook for a yarding block represented in figure 60 on page 3 of Defendant's Exhibit "B."

Said cross-head hook introduced in evidence and marked "Defendant's Exhibit 3-S."

Defendant's Exhibit "3-T" for identification is a yoke for a yarding block; this style of yoke was made as early as 1907.

Said yoke introduced in evidence and marked "Defendant's Exhibit 3-T."

This yoke would be called a shackle or the yoke of the block and was removably disconnected by pulling a pin out of one side and tipping it back.

Defendant's Exhibit "3-U," for identification, is a pin used in yarding blocks of the style made in 1907.

Said pin introduced in evidence and marked "Defendant's Exhibit 3-U."

Defendant's Exhibit "3-U" was a short pin; long pins for long bearings were also made at the same time.

Defendant's Exhibit "3-V" for identification is a pin for a Tommy Moore or moving block which has a bearing a very little wider than the sheave; pins

of this character have been made since 1905 or 1906, positively as far back as 1907.

Said pin introduced in evidence and marked "Defendant's Exhibit 3-V."

UPON CROSS EXAMINATION:

No one of the blocks concerning which I have been testifying had an oil reservoir or chamber in the cheek or side of the block.

Stipulated that the Complainant is the owner of the Willapa Harbor Iron Works.

TESTIMONY OF A. M. CLARK, recalled as a witness on behalf of the defendant.

MR. M'CARTHY: I will just ask one question; are your relations with the Willapa Harbor Iron Works—are you at the present time —do you have business relations with them, or manufacture articles for them?

"A. Yes.

MR. PECK: What do you manufacture?

"A. Block parts.

"Q. To what extent?

"A. I think we are doing all of the sheave business.

MR. PECK: How is your volume of business with the Willapa Harbor Iron Works compared with the volume of business for Mallory?

MR. M'CARTHY: I object as incompetent, irrelevant and immaterial.

COURT: I think he might answer that question since they have made some importance of it.

"A. I believe we are getting all of the Willapa Harbor Company's sheave work, at least, and we are doing a great deal of their side work at the present time.

MR. PECK: You misunderstood the question, Mr. Clark. I asked about the volume of business. How does the volume of business you are doing with one concern compare with the volume of business you are doing for the other concern? You are doing a great deal more for Mallory than you are for Gilchrist, aren't you?

"A. Very much more; very much more.

(*Transcript of Testimony, page* 286.)

TESTIMONY OF J. J. GEARY, recalled as a witness on behalf of the defendant.

I have had practical experience as a logger since 1888, and so far as I know all logging blocks have been provided with removable tops.

UPON CROSS EXAMINATION:

"Q. What do you mean by removable top?

"A. Can be taken apart, opened up so you can put the cable in or taken off to be repaired."

(*Transcript of Testimony, page* 287.)

TESTIMONY OF HENRY L. REYNOLDS, recalled as a witness on behalf of the defendant.

Comparing claims 4 and 5 of Gilchrist No. 977,613, I find them to be practically the same with a slightly different arrangement of words, except that claim 5 has no expression referring to the annular recesses in the adjacent faces of the block side nor as to the

pin having shoulders; the word "communicating" as used in mechanical expression means "having communication with," and does not necessarily mean "opening into"; where the flow of oil is being considered, it would apply to any form of communication by which the oil could pass from one to another; referring to Defendant's Exhibit "DD," the term would cover the flow of oil with just as much aptness as if the chamber were placed immediately at and in direct communication with the end of the pin; the specifications in claim 4 as to the pin having shoulders to engage the sides to prevent the same from binding upon the sheave would apply to the shoulders as shown in the pin in Labadie No. 513,067, and also to Defendant's Exhibit "3-U"; claim 5 is apparently an effort to have a construction broad enough to apply to pins threaded and without shoulders, which is the construction of the pin in the Morgan patent; referring to that part of claim 5, page 6, "a top having spaced lugs between which the projections of the side are adapted to fit," I find this specification met in Defendant's Exhibit "3-T," and if we were to apply the broader construction as used in the other claims of a removable top, defendant's Exhibit "3-S" would meet this element of the claim; the shackle on Defendant's Exhibit "GG" is a removable top; the top of the butt chain lead block on page 1 of Defendant's Exhibit "B" meets the requirements of a removable top, also the figure 60 on page 3 of Defendant's Exhibit "B" meets the provision of a removable top; Exhibit "3-R" meets the

provisions of the claim with reference to annular recesses in the side of the block, and the threaded openings in the side of this Exhibit meet the claim in that respect; Defendant's Exhibit "3-U" meets the requirements of the claim as to a shouldered pin, the axial bore of the pin and the openings in the side of the pin, and conforms exactly to the terms of the claim, being used for like purposes to obtain like results. I find all of the elements of claims 1, 4 and 5 of the Gilchrist patent No. 977,613 represented in the prior art prior to the date of the filing of the Gilchrist patent.

UPON CROSS EXAMINATION:

"Q. Do you find all of the elements united in any one patent or exhibit or prior publication that has been submitted to you, which cover the claims 1, 4 and 5 of the Gilchrist patent?

"A. Excepting that possibly in some minor thing—

MR. CARY: Am I not entitled to a direct answer? He gives it to his attorney, do you or do you not?

COURT: Yes.

"A. I can't say that I find them all shown in exactly the same relationship in any one patent.

MR. CARY: That is all.

MR. M'CARTHY: That is all the examination you wish to make on that?

MR. CARY: That is all; if he can't find it, that is all."

(*Testimony, Transcript of, page* 292.)

UPON RE-DIRECT EXAMINATION:

Claims 1 and 2 of patent No. 1,063,528, issued to J. E. Gilchrist June 3, 1913, are for a pulley of the same general type and character we have been discussing but are drawn to cover a combination which includes a member which is placed between the ears of opposite plates, by which the shackle is connected thereto, and forms the spacer between the two sides and as well a guard to guard the rope or cable which spaces over the sheave; the shape of this particular member is well shown in perspective on figure 4.

Referring to figure 3 in the drawings of the first Gilchrist patent, this figure does not properly show what is described in the claim, but is very deceptive.

"If the court will refer to the line which divides the ear 7 and the central ear 6 you will find that these lines at each side extend entirely across which would seem to indicate that the two ears 7 at one side of the pin 6 are one single piece which extend across there, and have no connection with the central portion which is lettered 8. That is not the construction which is described in the patent nor is it the construction which has been referred to herein by everybody so far as I am aware."

(*Transcript of Testimony, page* 294.)

Defendant's Exhibit "A" correctly represents the construction described in the patent.

The only difference between claims 1 and 2 of Gilchrist No. 1,063,528 is the omission in claim 2 of the explanatory statement "so that the member may be

partially withdrawn to free the shackle without freeing the guard"; the construction designed in claim 2 is one which might operate in the same way as the construction of claim 1, simply a matter of proper manipulation; Defendant's Exhibit "W" properly shows what is described in claims 1 and 2; the guard member tied into the sheave in Defendant's Exhibit "V" meets the description of this patent; in order to consider the connecting member between the spanners as being between the cheek plates, referring to Defendant's Exhibit "V," it would be necessary to consider the lugs at the top of the cheek plates as a part of the cheek plates; claims 1 and 2 of Gilchrist No. 1,063,528 are met by the specifications of the Littler patent No. 898,121. In the Gilchrist patent the grooved portion at the bottom of the guard is shown and incidentally described in the specifications, but is not claimed; in the guard attached to the Gilchrist block, Defendant's Exhibit "V," the connecting member between the two spanners cannot act as a guard because its surface is raised above the lower edges of the spanners, and the spanners are closer to the cable than the connecting member; the only members of the construction which can act as a guard are the two spanners; the cable would strike them before it struck the connecting member; these two spanners correspond with the compression links in the Littler patent; the connecting member of the guard on Defendant's Exhibit "V" is not placed as directly and accurately between the shackle and the sheave as is true of the connecting member of the

device shown in the Gilchrist patent; in the Littler patent the guard would be between the shackle and the sheave just as fully as it would be in the Gilchrist; the relative position of the guard member 12 in Gilchrist is very accurately shown in figure 2 of the Gilchrist drawing, which shows the upper surface of the guard member 12 as being below or substantially coincident in plane with the lower edge surface of the shackle; while in the device shown in Defendant's Exhibit "V" the lowermost portions of the spacing bar which serve as a guard are, if anything, a little above the lowermost portion of the shackle and the connecting bar, extending between the two side plates, is higher still.

The Gilchrist Logging Tools, admittedly the catalogue of the complainant, was introduced in evidence and marked "Defendant's Exhibit 3-W." Referring to cut in the Gilchrist catalogue on pages 14, 15, 16, 17, 18, 19, 26, 27, 28, 29, 30, 31, 38 and 40 with reference to guards, I can't be certain whether there is a cross-plate or not, excepting for that, however, they show identical with Defendant's Exhibit "V."

Admitted that the Gilchrist catalogue is a current catalogue. The guards shown in the Gilchrist catalogue appear to represent a device which as a whole in its shape resembles the capital letter "H"; I do not find a guard in this catalogue with alternately disposed ears such as are described in the patent and shown in the Defendant's Exhibit "W." On page 13 of the catalogue there is shown a block which has

a little suggestion of the Z shaped guard, where on one side there is shown what appears to be a washer, whether anything more than that cannot be told by the drawing. If there were such a device as the one you refer to, the corresponding member of the opposite side ought to show. Nothing of that sort shows, consequently, I can only assume it is not present.

UPON CROSS EXAMINATION:

In the Littler patent the spanners are called compression links and there is nothing said in the patent about a guard. The part No. 12 described in the Gilchrist patent is not found in the Littler patent, nor do I find any reference to that particular element in claims 1 and 2 of the Gilchrist patent. There is nothing in the Littler patent which corresponds to part No. 12 in the Gilchrist patent, but the spanners themselves of the Litttler patent constitute a guard extending between the cheek plates.

"Q. How many guards, if you call these compression links guards, how many guards in the Littler patent?

"A. There are two elements, each of which acts as a guard.

"Q. There are two guards? Adding two ears to the Gilchrist Z type and making an "H" form of it, does that change the function in any way?

"A. None whatever. I would suggest that unless some special function by the Z shape not secured by the other—I would say that the two are exactly equivalent."

(*Transcript of Testimony, page* 306.)

UPON DIRECT EXAMINATION:

No compression links were found in the Gilchrist patent but the member 12 fitting snugly between the two cheek plates acts as a compression member, I suppose. If the Z shape is used, the compression member 12 must fit snugly between the cheeks or the guard would form a very weak connection; in the Gilchrist patent the member 12 acts as a compression member, that is, as a spanner; the links of the Littler patent act in the same way. The elements of the Littler patent—lugs, ears and compression links—acting in conjunction, act in the same way and to the same end as the device shown in Defendant's Exhibit "V"; the only difference between the guard device shown in Exhibit "V" and the device in the Littler patent is that the two compression links shown by the Littler patent have been connected together so they could be handled as one; comparing the device as shown by Defendant's Exhibit "V" with claim 1 of the Littler patent, I would not hesitate at all in saying that the terms of this claim apply exactly upon the spacing devices used in the exhibit, and, therefore, if a device such as shown in exhibit had existed prior to the filing of this application and had been known of, it would undoubtedly have been considered an anticipation of it and sufficient grounds upon which to refuse to grant the patent. Defendant's Exhibit "V" is wholly within the Littler patent, the guard is spaced there and acts in exactly the same manner, performs the same function. The construction is the same, and the results secured

are the same; in Defendant's Exhibit "V" the resistance against the drawing in of the side acts wholly upon the pins; it is co-action of the lugs, pins and the spanners, and the connecting portion in between takes no portion of the load, which is also true of the devices shown on the Mallory blocks,—all of these blocks which have the H shaped guard, and that is not true of the device shown, described and claimed in the Gilchrist patent; in the Gilchrist patent it is highly improbable that the pins would take any of the compression load at all; apparently it was the intention under the Gilchrist patent to have the central portion of the element take all the compression without any compression on the ears at all; having in mind the prior Littler patent the compression member in the center of the Gilchrist device is the only element which presents any novelty whatever; no person with any knowledge of mechanics or the action of forces whould ever make a Z shaped design like that claimed in Gilchrist if they depended on conveying the compression strain on the ears and pins.

> COURT: "I think probably you have led this witness long enough; you have taken half an hour in putting answers in his mouth and have him say yes. He is an expert and ought to be able to explain these things himself."

If a device as shown in Defendant's Exhibit "V" had existed prior to the filing of the Littler application, it would undoubtedly have been considered an anticipation of the Litttler patent.

UPON CROSS EXAMINATION:

The links of the Littler patent are called compression links but they do serve as a guard between the shackle and the sheave and prevent the cable from getting up into the shackle but do not keep the cable from getting into the sides of the pulley block.

"Q. Now, you said yesterday that the function of the H was just the same as the Z in the Gilchrist block; that is so, isn't it?

"A. It performs the same function, a spacer, but connected between the sides and as a stop to prevent the cable from raising up into the shackle.

"Q. That is all; no use going over this time and again."

(*Transcript of Testimony, page* 314.)

UPON RE-DIRECT EXAMINATION:

"Q. Is there anything further in the prior art that you had in mind in these questions we have gone into?

"A. No; I don't think there is; I think everything has been pretty well gone over.

COURT: Mr. Reynolds, I understood you to say, you were a practicing lawyer in Seattle?

"A. Patent attorney.

COURT: Patent?

"A. Patent.

COURT: In active practice?

"A. Yes, registered before the United States Patent Office, have been since the requirement for registering.

COURT: As such attorney, are you interested in any litigation or probable litigation involving this Gilchrist patent?

"A. I have not been spoken to by anybody with reference to any litigation that is contemplated in the matter. I did, as I said before, make a report—

COURT: I know you said expert.

"A. As an expert, pass upon the question of infringement. Aside from that, that is the only thing that has had any connection with the Gilchrist patent.

"Q. In that connection, who was it requested you to pass upon that question?

"A. That matter was referred to me by an attorney in Seattle.

"Q. Was not by any direct employment of any company?

"A. No; it was by a practicing attorney in Seattle, for a client of his.

RE-CROSS EXAMINATION:

Questions by MR. CARY:

"Q. You mentioned the Washington Iron Works; what did you mean by that?

"A. I found out it was for the Washington Iron Works.

"Q. Who are interested in this litigation?

"A. I wish to say that the Washington Iron Works have never intimated to me a suit, that they expected to have a suit, and I am not employed by them in any connection pertaining to this.

"Q. Do you expect probable future employment by that company?

"A. That is a matter for the future to determine. I haven't been approached in that line at all as yet; whether they will, I can't say."

(*Transcript of Testimony, pages* 314 *to* 315.)

TESTIMONY OF F. B. MALLORY, recalled as a witness on behalf of the defendant:

Prior to the use of the H form of guard which we are now using we used a guard or spacer early in 1908 just below the lugs, half way between the lugs and the curve of the sheave we used a bolt, drilled a hole in each side and put a bolt through, and then a piece of pipe was cut and inserted over that bolt between the two sides, which acted as a guard, and also as a compression strip; the pipe on the bolt acted as a shoulder against each side, and the effect of this guard was to hold the cheeks rigidly in position; the shackle could be released without damaging the guard; we are operating under the Littler patent in using the H guard.

UPON CROSS EXAMINATION:

The spacer on the bolt guard had no connection with the lugs described in claim 1 of Gilchrist patent No. 1,063,528, and so far as the compression feature is concerned this guard does not conform to such claim.

TESTIMONY OF E. L. TAYLOR, recalled as a witness on behalf of the defendant:

I made a bolt guard for Mr. Mallory such as just testified by him, as far back as 1907 or 1908; manu-

factured them in quantities for him so he could put them on the market.

UPON CROSS EXAMINATION:

With this bolt guard he would have to take the bolt out and put the cable in, or else thread the cable through.

"MR. M'CARTHY: If the court please, Mr. Reynolds has further suggested that the opinion which he wrote and spoke of is bound in this volume of patents here, and we are perfectly willing for counsel and court to see to whom it was addressed; we would be glad to have you.

COURT: We will take his word for it.

"MR. PECK: He has already testified he had that in his hand during the time he was testifying and said he was testifying from that memorandum and that he acted as patent attorney. That is all we want."

(*Transcript of Testimony, page* 321.)

DEFENDANT RESTS.

TESTIMONY of WILLIAM TYLER, called as a witness on behalf of the complainant in rebuttal.

My age is 35 years; residence South Bend, Washington; occupation, logger for the past 22 years; started in the logging business at Grays Harbor in about 1898, oiling blocks with a common squirt can; at that time ox teams and horses were used and logging blocks were used as tackle blocks to remove extra heavy logs, the ordinary logs being moved by horses and oxen without blocks.

Started in the logging business oiling blocks and then I worked on the rigging where we were using blocks and lines all the time; about 7 years later I went to sawing timber; from that time I went to running camp for myself and for other people up to the present time; have been acting as foreman of a logging camp for about 11 years; ran my own camp up to 1914, and since then have run a camp a year for the Hammond Brothers, two and one-half years for the Case Shingle Company, and am now running a camp for the Kleev Lumber Company, during the last 11 years have logged on the average of a million feet per month; have run the camps with two sides, meaning two separate crews of men and separate engines, a side being a complete unit in itself; the biggest camp I ever ran employed about 150 men.

When I started logging, horses and oxen were used and logging with steam donkeys came in about 1902 or 1903; the first logging blocks used were pieces of scrap iron made in camp, the system of lubrication being to oil them with the squirt can; and you had to oil them every time you made a pull on them, and if you didn't, you wouldn't have any block; if the camp was any size it took a man steady to oil the blocks; the first blocks had no extra width in bearing.

The next improvement of blocks came about 1904 or 1905 when the compound or grease cup block was introduced; this was a block put out by the Bouse people with a plug in the end of the pin; you could put a little compound in there and screw down the

plug; then a little later another kind of a block came out with a cup which you screwed down with a regular cap, not an elbow, they didn't use them things, just used a sleeve on it, put a sleeve on where they had that elbow; the compound was hard grease which was forced in with pressure; these compound blocks stayed in general use until we got the Gilchrist block.

The first Gilchrist block I used was in the spring of 1910; the high speed donkey engine came in along about 1905 or 1906; the grease cup block was not a satisfactory appliance to work with a high speed engine, because you couldn't have a man around all the blocks and keep the cups turned down to keep the blocks from burning up; you had to have something that would oil itself; you would have to send a man around to turn down the grease cups about four times a day, twice in the forenoon and twice in the afternoon; in a big camp that would keep 3 or 4 men busy. The line runs through these blocks with a fast engine pretty close to a mile a minute; my actual experience with a grease cup block shows that they would not stand up under this high speed work; we were worrying along with a grease cup block before we got the Gilchrist block; prior to the use of the Gilchrist block I had never seen a self-oiling block of that type and had never heard of it; if I had I would have bought one.

The Gilchrist block has been a perfect success.

"Q. How are they a success over the grease cup block?

"A. Well, for the simple reason they are a cheaper block to operate. You don't have to have a man around to look after them, and one of them will last many days longer than any other block, because it it always oiled. You don't have to be buying parts for it every few months.

"Q. Don't burn it up?

"A. Don't burn it up every day or so."

(*Transcript of Testimony, pages* 327 *and* 328.)

The original cost of the Gilchrist block is a little more than the grease cup block; have used the Mallory self-oiling blocks interchangeably with the Gilchrist block, and I see no difference in the operation; the features of the self-oiling block which appeal to me are the strength of the material of the blocks, the building of the block, the mechanical work that is done on it, the guard which keeps our lines from cutting out the gooseneck, the self-oiling apparatus which makes it a cheaper block to operate, the better success with the sheave, it is self-oiling and it don't cut out, you don't have to buy bushings every two or three days to fix it up, it is always in condition; the extra width of bearing is of value because it gives the block more strength and renders it less liable to burn when under heavy duty; when we had the narrows sheave the bushing would squash out with a hard pull. We pushed the bushing right out, would cut the pin or break the sheave; in the use of logging blocks the pull is in every kind of a way you can conceive of; with a side thrust pull on a narrow sheave

with narrow axle bearing it would mash it right out, would naturally squash it right out on that side; the recesses of the sides and the hubs of the sheave projecting into the recesses in the Gilchrist and Mallory blocks are of benefit for the simple reason it not only protects the block from dirt and dust, keeps it out of the bearings, but it gives a longer bearing on the pin without putting extra weight into the block, you have a stronger block without extra weight by lengthening the hub of the sheave, if you don't do that, in order to have the strength in your block, you would have to have a sheave so big you couldn't do anything with it; in the use of blocks in the woods there is every chance for dirt to get into the block for it is dragge dthrough the ground, over rocks and sand, and everywhere it could be, to get a chance to get dirt.

I have been around other camps and the Gilchrist type of self-oiling block is being used everywhere that they can get hold of them; I would not buy any other kind of blocks and have all that type of blocks in my camps; I am using the self-oiling style of block rather than the old grease cup block, because the grease cup block costs a man too much money; he would be buying repairs all the time, they are no good after you get them.

Defendant's Exhibit "C" is not a practical block because it isn't a strong enough made block and it has that old compound rig on it that is no good, it won't stand up under heavy pressure; cut right out,

has small sheave; the compound rig on the outside is in the way, you can't pack it; if you hang it up it gets knocked off, you have nothing to oil with and nothing else; that kind of a block has to go through the dirt, over stumps and dragging all around through the woods, and there is not a thing in the world to prevent this oiling device from being knocked off; I have used that kind of a rig and had lots of trouble with it.

I never saw a block with a stove-pipe rigging like Defendant's Exhibit "D"; would not work very long; it might work until it got hung up somewhere and got a chance to knock that off.

"Q. What would tend to knock it off? Tell the court what would be your experience with that kind of a layout?

"A. The line throwing the block around and striking on the side of the tree, where hung on the side of the tree; supposed to put your line out in the woods, and to do that with a haulback. As soon as you started out, you would hit on a log or stump and tear that right off; you wouldn't have anything; your block would fly all to pieces, and there you would be."

(*Transcript of Testimony, page* 332.)

I never saw a block like the Morgan block shown as Defendant's Exhibit "BB," and never heard of that kind of a rig; it is not practicable construction for a logging block because it isn't built for a log-

ging block to start with, the hook would break off the first time you started to use it and the pin is too small; the oiling device would be torn off the first time you tried to put it out in the woods; these big high-lead blocks weigh 1200 to 1400 pounds and we drag them around through the woods on the ground, over stumps and boulders, and all that sort of thing. A side riveted on a 1400 pound block would not hold tight very long; you would never get it hung anywhere, I think. When these blocks are hung up high in the tree and there is a strain put on them, they swing away from the tree and when the strain lets up they jam back against the tree; when a 1400 pound block with a side riveted on, as in the Morgan block, is swung away from the tree, and swung back against the side, it would beat the oiling device right off, carry it right off there.

I am familiar with high-lead logging; in ground logging the logs are dragged right on the ground; in the high-lead work one of these big blocks is hung up in the top of a tree, as high as 200 feet and the main line is run through this block; then they hook onto the logs and the main line brings the logs in towards the spar tree, leading the nose of the log off the ground, the closer to the gin pole or spar tree the higher the nose of the log; that is what is meant by high—lead work,—the leading of the nose of the log high off the ground.

"Q. What has made possible the high-lead system of logging?

"A. The advancement in this block business.

"Q. Could you do the high-lead work effectively with the old grease cup block?

"A. No; we couldn't.

"Q. Did you ever try it?

"A. No, I never tried it, but it would be practically impossible; you would have to have a man up there every few minutes oiling the block."

(*Transcript of Testimony, page* 335.)

The high-lead block is up in the air from 140 to 200 feet, and the men who climb up the trees to adjust these blocks are specialty men whom we have to pay large wages to; it is dangerous work with lots of chances; the ordinary logger doesn't do that work at all and the men have particular equipment, like the men who climb a telephone pole, to do the climbing. If you were using the grease cup block with the present speed of lines, you would have to send a man up to look after the block 5 or 6 times a day and even then it would not work successfully; in my experience with grease cup blocks we burn them out no matter what care or attention we might give them; but we don't burn out these self-lubricating blocks.

"Q. Now, tell the court just whether or not this high-lead system of logging is an advance in the logging business, a step in progress?

"A. Yes, it is, for this reason, that you can take the same crew of men with high-lead, and you can put out at least a half more logs to a high-lead than

you could on the ground in the same locality. It is a big advancement for that reason.

"Q. Is it a step that has come to say in the art?

"A. I think it has, and all loggers that have made a success in the business says it has."

(*Transcript of Testimony, pages* 336 *and* 337.)

When these grease cup blocks would burn up we had to get another bushing and put in the sheave and fix the block up to go to work again, and while this was being done operations would be held up so that the men working on the line would be idle; if you had 15 or 18 men around there they would be idle until you got to going again; the self-oiling block does away with this suspension of operations.

UPON CROSS EXAMINATION:

My own camp, the Hammond Brothers camp, Case Shingle Company camp and the Kleeb camp were all in the Willapa Harbor section; I have also worked in the Grays Harbor section, but not running a camp; have had trouble with the elbow blocks and have used lots of them.

"Q. Then they were quite generally used, the elbow blocks, were they not?

MR PECK. We admit that."

(*Transcript of Testimony, page* 339.)

The high line system of logging has come into general use during the last four years; the small Gilchrist block had been on the market a long time be-

fore that; Gilchrist made the large block before high-lead came into vogue, he made them for yarding purposes; such blocks were larger than the blocks in evidence, butt chain blocks used for ground work; we had large blocks to move the machinery with and large donkeys before the high-lead logging was developed; never used elbows on blocks, I took the elbows off and put straight sleeves on them, which I liked better than the elbow; took the elbow off because I wanted to use compound; ordinary oil would not work if you left the elbow on, I tried it; I tried them with that elbow on but took it off and put the sleeve on; when I used the elbow the block burned up with soft oil, never used a wicking of wool or cotton for there was no room in there; blocks with the elbow couldn't be carried on the shoulder, the elbow would interfere with your shoulder, according to the size of the block you had on your shoulder, I suppose a man would know enough to put the side without the elbow against the shoulder; the big Tommy Moore, a thousand or twelve hundred pound block was made long before the regular high-lead block; that was a butt chain block; the old Tommy Moore block now used as a butt chain block with the elbow is not practical today; these big, heavy, high-lead blocks are dragged through the woods in logging operations in moving from one place to another and when in operation are up in the air stationary on a tree; we use the reservoir blocks both on the ground and up in the air; I used the large Gilchrist blocks with oil reservoirs before I used the Mallory type; am not positive when the Mallory high-lead blocks came out; first saw a large sky-line Gil-

christ block about 5 years ago; the line from the high speed engines runs pretty close to a mile a minute, as judging from the length of line and the length of time it takes to make a trip; on a yarding engine we use a 1600 foot line. The Case Shingle Company has an engine manufactured by the Seattle Iron Works which will pull that line in in less than a minute's time; I have an idea the Willamette Company has the biggest donkey engine trade on the Coast; I don't think the Willamette Company makes quite as fast a donkey engine as the Washington or Seattle Iron Works.

The Mallory hub does not fit as closely into the recesses as the Gilchrist hub and does not make what is called a dust-proof block, in that the construction is different; I don't know whether in the Mallory block there was an attempt to make a dust-proof block or not, but it doesn't make "very much" of a dust-proof bearing; the Gilchrist block is a practical dirt-proof block, the Mallory block is not; I can't tell the exact date when I first saw a long bearing; can tell the exact date when I saw the Gilchrist block because I used it; I also used a block of a long bearing but I didn't write down any dates; I naturally would know when I first saw the Gilchrist block from using it; the Tommy Moore blocks with long bearing, which I used, were put out in 1906 or 1907; the Tommy Moores had just as long a bearing in proportion to the size of the sheave as the self-oiling blocks; the Tommy Moore had a hole in the pin with a transverse

hole drilled from the center of the pin to the bearing surface and some of them had two holes; I saw that style of block as far back as 1906 and 1907; the pin had shoulders to fit up against the inside of the shell, but did not have threads; am familiar with the Bouse block pins, which at first did not screw into the sides; have seen a Bouse block with pins that didn't screw into the sides but don't know just exactly when or where; in 1906 I saw blocks with pins that screwed into the side of the shell; it was a common thing for pins to screw into the shell then, on one side generally, and to have long bearings if you needed them; some had recesses with long bearings and some did not, but the recess style of construction was on lots of blocks. In my logging experience all blocks had tops that you could release a pin from one end and throw open the shackle; I have been in the Polson logging camps; I never saw a block of the design of Defendant's Exhibit "3-X," for identification, and never heard of a block of that type.

Block marked "Defendant's Exhibit 3-X" for identification.

I worked around the camps in the early days of the Northwest and have seen the blocks and used them, but never saw anything that looked like Defendant's Exhibit "3-X." A logging block with an oiling device like Defendant's Exhibit "3-X," for identification, would not be practical for you would lose it the first time going through the woods, would knock

off the attached chamber; in the early days blocks were made from hammered out boiler plates; we had no cast sides.

"Q. Then the only method of putting the oil chamber on them in the early days would have been by either bolts or rivets, would it not, before the shells were cast?

"A. I don't suppose ever thought of putting one on."

"Q. If they did think of it, that would be the only way it could be put on, wouldn't it?

"A. I suppose so."

(*Transcript of Testimony, pages* 350 *and* 351.)

First saw a block with a cast side in 1905. Defendant's Exhibit "3-X," for identification, even if cast, would not be practical because of the make of it, no shape to it, the oiling device would not be practical, if cast on it, because it is too small; I suppose it would be practical if it were made large enough and cast on instead of bolted on; probably serve the same purpose as the Gilchrist oiling device; the question I have in mind is as to whether or not the oil reservoir is large enough and properly secured.

The high-lead blocks hang in the trees and when the line is tense would swing out from the trees, and when slackened up would slam up against the tree again; the blocks are swung so you can take them out of the tree and use either side; they are hung as close to the tree as they can be hung by a strap; some

blocks have swivels; most of them are not placed with swivels; the same side of the block would not bang against the tree if you turn it around, but the same side would bang as long as you could keep it that way; if the oil cup were on the outside of the block it would not hit against the tree but the jar would knock it off; the reason we took off the elbows and put on the straight sleeve was so we could screw the plug up better; the sleeve had about the same capacity as the elbow and projected out about the same.

"Q. Now if that block were built with heavy enough sides, with sides as heavy as are used in the Gilchrist and Mallory blocks, and if this oil reservoir was of as heavy material as in the Gilchrist and Mallory block; had a shackle on there, as heavy as is used in the Gilchrist and Mallory blocks; pin was of the same size, and the length of the bearing was the same as in the Mallory or Gilchrist blocks, what would you say as to whether or not that would be a practical logging block?

"A. Well, if built just exactly like that.

"Q. No, I am just giving the heft and weight and size.

"A. Not with that patch stuck on there, it would not be.

"Q. Not with that patch. Now if the patch were of the same shape there, and was a casting, a portion of the cast side, would that be practical?

"A. Would be the same as the Gilchrist then.

"Q. Just the same?

"A. Practically.

"Q. Wouldn't be any distinction between that and the Gilchrist if that were solid casting?

"A. If made just like it—

"Q. The same block. If that were solid casting you would consider the same as the Gilchrist?

"A. No, I wouldn't.

"Q. What would be the difference?

"A. Different shaped block.

"Q. The sheave is round?

"A. Certainly.

"Q. What particular portion of the shape?

"A. The build where the hook is, is a different shape.

"Q. If that had a shackle instead of a hook, would it be the same?

"A. I don't know. I would have to see the block. I don't know much about that kind of business. I would have to see the block and look at it."

(*Transcript of Testimony, pages* 353-354.)

The Gilchrist block is not made with hooks now; he has the pattern but not in common use today. The Tommy Moore style of block shown on page 1 of Defendant's Exhibit "B" is something like the block to which I referred in my testimony, something of that style; that style of block is not used very much now, might be in some places; I would not say that it was a practical block with that compound stuff on it.

UPON RE-DIRECT EXAMINATION:

The Gilchrist or Mallory self-oiling block will hang in a tree in operation without oiling for a length of time depending upon the work which it is doing; if it is working hard, it will hang at least two weeks and if not working hard it will hand longer; by a "set" in the woods we mean where we rig up a tree and yard all around it just as far as we can reach with our lines, that is one "setting" in the woods; when this block is filled and hung up in the tree as a rule it will operate without oiling for that setting so that as a general rule you only have to oil or fill it when you have it on the ground and put it up.

With reference to the line guard when you have the block hanging in the tree, if you don't have this guard on, your lines are coming back or going in with the log, the line is flying, the block will fly up and down and the line will fly up and catch here and there and saw into the oil well or saw the gooseneck off, or saw the line off, destroy probably 500 or 600 feet of line, and possibly ruin the block at the same time; that is the idea of the guard, to keep the line from flying up and fouling. The idea of the guard is to keep the line where it belongs for if a line does not follow the sheave the line will run across the gooseneck and saw it off and ruin it, or run into the side of the block; have had lots of blocks destroyed in that way and it was a very common complaint in the woods. This Gilchrist guard, Complainant's Exhibit 8, remedies that defect.

The first fast engines came in in 1905 or 1906 and then there was something like 4 or 5 years before the Gilchrist block came and we had no self-lubricating block; we fought along with them compound blocks, which were not practical for use with the high speed engines.

UPON RE-CROSS EXAMINATION:

In speaking about the quick trip of the line on a high speed engine, I referred to either way, whether loaded or unloaded, I didn't say that they hauled logs through the air at the rate of a mile a minute; with a log on the line there is no way of telling how fast it goes, according to how big the log is; when there is no load on the line, there is no great strain on the pulley; a double guard is a much better guard than Complainant's Exhibit 8, the one with two ears, similar to Defendant's Exhibit "V," is a better guard, and stronger than the Z-shaped guard; the H-shaped guard would resist the tendency to pull in the sides of the block better if there was any pull against it; to prevent the crowding in of the sides the H-shaped guard would be stronger; the Defendant's Exhibit "V" is a stronger guard than Defendant's Exhibit "W"; the bolt and barrel type of guard, testified to by F. B. Mallory, would keep the line in all right, but you couldn't get the line out, although you could release the shackle without removing such a guard; I don't know what is the relative speed of the drum of the donkey engine bringing in the load and the speed of the haul-back drum, although they

do not run at the same speed; I figure my estimate of a speed of a mile a minute from the distance our main line runs in and the time it takes to put our main line out; it takes our 1600-foot line about 20 seconds to run out; the time it takes it to bring a line in depends on how big the log is and how many times it hangs up; outside of the question of convenience of removing the cable, I suppose the bolt and barrel guard would be just as effective as any other; the shackle could be removed just as readily as the other; if one just desired to remove the shackle and not take the line off the sheave the bolt and barrel guard would do just as well as the style of guard shown on Complainant's Exhibit "8."

UPON RE-DIRECT EXAMINATION:

Whenever you relieve the shackle you want to relieve the line too.

"MR. M'CARTHY: If that is true, what is the advantage in the invention you claim? Does the plaintiff wish to concede as a part of the record, that whenever you want to remove the shackle you want to remove the guard. Do you wish to concede that in the record?

"MR. PECK: You don't get my question. What I said was, when you relieve the shackle you want to—when you move your block you want to get your line out; you don't take your block and move along with the line.

"MR. M'CARTHY: You wish to take the block off the line?

"MR. PECK: Certainly. Take the whole thing apart.

"MR. M'CARTHY: If that is conceded in the record, you can finish the case quicker.

"MR. PECK: No question about that."

(*Transcript of Testimony, pages* 262 *and* 263.)

UPON RE-CROSS EXAMINATION:

The high-line, sky-line and high-lead blocks have no guard like the Gilchrist guard; they have their yoke.

UPON RE-DIRECT EXAMINATION:

The reason for lack of guard is because the block is heavy enough and the yoke is heavy enough, the line stays down as it pulls on the block and the yoke is heavy enough to keep the cheeks apart.

TESTIMONY of WILLIAM F. HEGELE, called as a witness on behalf of the complainant in rebuttal:

My age is 33 years; residence—Seattle, Washington; was bookkeeper for Willapa Harbor Iron Works from 1913, going with them in the first part of 1913 and remaining 4 years and 11 months.

Witness identifies a copy of the letter of the Willapa Harbor Iron Works of date May 19, 1914, to Messrs. C. A. Snow & Company as the copy of a letter which he wrote as bookkeeper of the Willapa Harbor Iron Works.

"MR. M'CARTHY: Objected to as incompetent, irrelevant and immaterial. This is a letter which on its face purports to be written prior to the time this matter was taken up between Mr. Mallory and Mr. Gilchrist, and could have no bearing.

"COURT: Who is the letter addressed to?

"MR. M'CARTHY: The letter is addressed to Snow & Co., the Washington patent attorneys of the plaintiff here.

"COURT: I can't conceive what bearing that has on the question of laches between Gilchrist and Mallory; that is the only question in this case.

"MR. PECK: They have plead not only laches, but equitable estoppel, and that Gilchrist, by his course of conduct, has misled them. We have a right to show what his course of conduct was in this issue.

"COURT: As to the defendant Mallory. But the course of conduct of someone else would not be notice to Mallory.

"MR. PECK: With the question of equitable estoppel comes up the question of Gilchrist's good faith in this business.

"COURT: You can put it in the record if you wish, but I can't conceive what possible bearing it has on the question in this case. You can file it in the record.

"MR. M'CARTHY: While the record is not complete yet, it appears to me, if the Court please, largely as if this was an attempt to get the legal opinion in the record.

"COURT: I don't want that in; we have too many things in now.

"MR. PECK: We offer this in evidence.
(*Marked Complainant's Exhibit* 17.)

"COURT: You can identify them and file them, and if they are competent testimony they will be considered, but I can't see what bearing it would have on the subject of laches in this case. I understand the defense is that the Mallory Company was misled by the conduct of Gil-

christ, and as a matter of equity he ought not to insist, as against Mallory, on the validity of this patent, or the infringement, rather. That is what I understand the defense to be. Not that Gilchrist had abandoned the patent.

"MR. CARY: All we can show is that Mr. Gilchrist was diligent in ascertaining his rights, and these letters show that he was.

"COURT: He can testify to that effect. You can put it in the record, as I said, but I don't see what bearing it has on the case.

"MR. M'CARTHY: Under the practice there is no necessity of saving an exception?

"COURT: I think not, but you can save it, in order to keep the record clear.

"MR. M'CARTHY: Save an exception."

(*Transcript of Testimony, pages* 365, 366 *and* 367.)

Witness identifies letter of C. A. Snow & Company to J. E. Gilchrist of date June 8, 1914, and the same was introduced in evidence and marked "Complainant's Exhibit 18."

Witness identifies letter of June 15, 1914, from Willapa Harbor Iron Works to C. A. Snow & Company and the same was introduced in evidence and marked "Complainant's Exhibit 19."

The "infringer's ad" referred to in Complainant's Exhibit 19 was the ad of F. B. Mallory Company in the April, 1914, Timberman.

Witness identifies letter of August 19, 1914, to C. A. Snow & Company from the Willapa Harbor Iron

Works and the same was introduced in evidence and marked "Complainant's Exhibit 20."

Witness identifies letter to Willapa Harbor Iron Works from C. A. Snow & Company of August 25, 1914, and the same was received in evidence and marked "Complainant's Exhibit 21."

Witness identifies letter of August 31, 1914, from C. A. Snow & Company to Willapa Harbor Iron Works and the same was received in evidence and marked "Complainant's Exhibit 22."

Witness identifies letter of September 18, 1914, to the Willapa Harbor Iron Works from C. A. Snow & Company, and the same was received in evidence and marked "Complainant's Exhibit 23."

Witness identifies letter of November 12, 1914, from F. B. Mallory & Company to John E. Gilchrist and the same was received in evidence and marked "Complainant's Exhibit 24."

Witness identifies letter of November 16, 1914, addressed to F. B. Mallory & Company, and the same was received in evidence and marked "Complainant's Exhibit 25."

Witness identifies letter of November 17, 1914, from Willapa Harbor Iron Works to F. B. Mallory & Company, and the came was received in evidence and marked "Complainant's Exhibit 26."

Witness identifies letter of November 25, 1914, from Willapa Harbor Iron Works to F. B. Mallory, and the same was introduced in evidence and marked "Complainant's Exhibit 27."

Witness identifies letter of January 25, 1915, from C. A. Snow & Company to Willapa Harbor Iron Works.

> "MR. M'CARTHY: At this time I wish to make the same objection I did before, and save an exception."
>
> (*Transcript of Testimony, page* 369.)

Last letter introduced in evidence and marked "Complainant's Exhibit 28."

The letter of F. B. Mallory & Company referred to in Complainant's Exhibit 28 was the letter of November 12, 1914, Complainant's Exhibit 24.

Witness identifies letter of April 26, 1915, to F. B. Mallory & Company from the Willapa Harbor Iron Works and the same was introduced in evidence and marked "Complainant's Exhibit 29."

Witness identifies letter of April 29, 1915, to the Willapa Harbor Iron Works from F. B. Mallory & Company, and the same was received in evidence and marked "Complainant's Exhibit 30."

Witness identifies letter of May 6, 1915, to the Willapa Harbor Iron Works from Loyal H. McCarthy, and the same was received in evidence and marked "Complainant's Exhibit 31."

Complainant's Exhibit 31 contained a list of patents upon which the defendant claimed to rely; this was the first time that we obtained this list of patents; such list of patents was submitted to our attorneys, C. A. Snow & Company, in Washington,

D. C.; I remember receiving an answer from C. A. Snow & Company but I couldn't recall the date, have searched the file for a reply and cannot find it.

UPON CROSS EXAMINATION:

The answer which we received from Snow & Company recommended a course to pursue.

TESTIMONY of W. S. CRAM, called as a witness on behalf of the complainant in rebuttal:

Age—53 years; residence—Raymond, Washington; occupation—manufacturer of lumber; we are logging and manufacturing lumber at Raymond, conduct two sawmills and lumber camps; we are now logging about 7 or 8 million a month; am president of the Sunset Timber Company, devoting all my time to this business; have been interested in the logging business since 1902; am more or less familiar with logging blocks, using them in our camps since I have been engaged in the business; we first used a block with just two sides and a sheave which had to be oiled with an oil can; used that for about five years, I think; then later some one invented or brought into use what is known as the grease cup block and that was used for five or six years, and then self-oiling blocks of the Gilchrist type came into use; the first I ever heard of the self-oiling type of block was the Gilchrist block about five or six years ago; in the history of logging engines, when they first started, they used small engines and had much easier work; as logging progressed, the logging machinery was en-

larged and improved and a great deal of trouble was experienced with the oiling of blocks; there was a good deal of time lost with the blocks heating and having to put in new pins and new sheaves, etc.; I think it was five or six years after the grease cup block came in until the self-oiling block came; during that time of course progress was made in the size of the engines and the speed and everything else; the speed of the engines and machinery expedited logging so that we produced more logs; am familiar with the high-lead and sky-line system of logging which we used to some extent in our operations; I regard the high-lead and sky-line systems as a step in the advance progress of the business of logging; it is becoming more popular all the time. With the high-lead system of logging it would be possible to use the old grease cup system, but not practicable; it would be very cumbersome and we would lose a great deal of time with it because we would have more or less heating of blocks and pins; the blocks on the high-line are not accessible, so that the trouble can be corrected; they are usually up out of the way where it is quite a trouble to reach them; the self oiling blocks have displaced the grease cup blocks with the big companies to quite a large extent, particularly on the high-lead work and in important places or hard places; they are using the self-oiling block quite generally, I think; we are using quite a few of the self-oiling blocks and in the buying of new blocks today we are buying self-oiling blocks; I don't think we are buying any other type of block; am familiar with

the logging industry to quite an extent in the State of Washington; it is my understanding that the self-oiling blocks are used quite generally in the logging industry.

UPON CROSS EXAMINATION:

Am connected with the selling end of the business and the general management of it; logging blocks are bought out of our office; I do not have charge of the buying of supplies, but any changes in the purchase of equipment is usually referred to myself or Mr. Siler, or sometimes to both of us; I have heard the discussions about these blocks in other camps and the only personal observations I have had was in my own camps, what the foreman tells us of the operation of these blocks; I am not a mechanic and don't go out into the woods and superintend the camp; my information is based on what my foreman tells me; I know in a general way we are using self-oiling blocks; I know from my personal observations we are using self-oiling blocks; I see the invoices going through the office, I investigate and purchase them; first started on the sky-line plan of operation three or four years ago; I think we used the self-oiling blocks before we started the sky-line plan of operation; we used the Gilchrist self-oiling blocks; I don't recall the use of any Mallory blocks; Mr. Gilchrist's plant is near us and he is handy there and invented this block so we naturally used it; the Gilchrist block was a good block and what the industry needed; the industry needed a self-oiling block; I don't know who

pioneered the high-line logging in this part of the country; I presume it was some loggers that figured it out; I don't know whether Mr. Mallory introduced the high-lead logging into my section of the country or not; we have dealt with Mr. Mallory for a number of years but I couldn't swear positively whether we have bought anything lately from him; I don't recall seeing any invoices of Mr. Mallory for some time; I couldn't tell everything that is purchased for our camps, but generally when I am there I handle all the material, all the invoices, and pass the invoices to the different departments in our office. I open all the mail when I am at Raymond, but of course, when I am away, as I am today, these invoices come to the office and they are opened up and passed to the bookkeeper by someone else; my co-operation is to check from the financial end just what is doing and before making any important change in the buying we always discuss it; we rely upon and tell our purchasing man to buy logging blocks; we don't go and order blocks from the factory; we discuss any change in the design of blocks as we do concerning a change in all of our machinery; if we want to make any changes, we discuss it usually with Mr. Siler, Mr. Owens and myself; we instruct our superintendents in the mills and in the camps not to buy anything without first consulting Mr. Siler or myself; we often take the advices of our superintendents, that is natural; practical experience makes their advice necessary sometimes; we always try to analyze anything very carefully before we change; the first block we used was

just a plain block with two sides and a sheave, just used oil on the bearing and sheaves; can't just say how it was oiled, I think the oil was put right in the bearing; I am not a mechanic; some had straight pieces and some had elbows; we used black engine oil that you could squeeze out of a can to get on the sheave; it seems to me that there was some wool packing used in the box of the oil chamber, but I couldn't say positively; I couldn't describe the difficulties with that kind of a block for I didn't have the practical experience in using them; the self-oiling block is very important in the sky-line operation; sky-line operation has made it possible; self-oiling devices were always an advantage in any machine; the sky-line system of logging probably helped the demand for the self-oiling block, undoubtedly; if there had been no sky-line system of logging there might not have been a demand for the large self-oiling blocks; some ground is very rough and you have to have more powerful machinery to handle the logs, particularly down in our country, we have some very rough ground, ground that we could hardly use a high-line system on, and it takes some very strong block to log this ground; I don't recall but I think the self-oiling blocks came in after the sky-line system was adopted, as I understand the self-oiling block has been in use about five or six years; I wouldn't know a Gilchrist block from a Mallory block in going through a logging camp, unless I made inquiry; and unless I was making an inspection for that purpose I wouldn't notice whether the blocks had oil chambers at all;

from personal observation in the woods I couldn't answer positively what blocks we are using; as different designs and improvements in logging blocks have come out, I have naturally looked at them, considered them, and analyzed them as best I could; I am not familiar with the details of logging blocks since 1902; I am familiar in a general way with logging blocks; have never been what is termed a practical logger actually engaged in logging; I have never superintended a logging camp nor worked in one; have been interested in the way I have stated, handling the office, buying the logs, selling the logs, buying timber, opening up logging camps and buying supplies; I could not say whether logging blocks are generally made with removable heads or not; I don't know what you mean by guards on the logging block; I don't think I could tell you what a shouldered pin is, nor what a block is that has a pin terminally threaded in the sides.

> "MR. PECK: We haven't presented this man as a mechanical expert. We have presented him for his executive connection with the logging industry, as knowing the general course of the logging business as applied to this block business. That is the only way we have presented him."
>
> (*Transcript of Testimony, page* 386.)

I couldn't tell the mechanical parts of the block, am not a mechanic; we have men for that work; I haven't given the mechanical part any close study, nothing more than I know the self-oiling blocks and

know that we used to have an old oil can system, then the grease cup came, then the self-oiling block came.

TESTIMONY of H. F. WEATHERBY, called as a witness on behalf of the complainant in rebuttal:

Age—44 years; was roundhouse foreman and master mechanic with the Tacoma and Eastern Railroad Company from 1902 until 1906; during that time we built logging blocks for the Cascade Timber Company and for the North Coast Timber Company; the latter part of 1914 I took the agency for the Willapa Harbor Iron Works line of logging tools, having all the territory of Washington north of the South Bend branch; when I was with the Tacoma Eastern and while I was employed as machinist for the Puget Sound Iron and Steel Works, I handled logging equipment; when I was employed by the Tacoma Eastern we made a very simple block, the sides of boiler plate, riveted straps on the sides for the ears, a square hole in either side corresponding to the square end of the pin, both ends of the pin threaded for putting a thin nut on one side to hold the shoulders of the square against the sides of the block; we left enough thread to screw a pipe coupling on and then fitted a plug to force the grease through the hole in the pin, through a cross bore to the surface of the pin; we built that block from 1902 to 1906; I first heard of the self-oiling blocks in 1909, and I called on Mr. Gilchrist in South Bend and he showed me what he was doing with it; that was the first I ever

heard of the self-oiling patent block, in fact, it was the first cast steel side block I ever remember seeing; subsequently, in 1914, I accepted the agency for the Gilchrist line of blocks and handled them until August, 1916; in 1916, when I gave up handling the Gilchrist line of logging tools, the self-oiling block was used quite generally in logging camps, but not exclusively in any of them; it was very popular with high-lead and sky-line operation; I visited all the camps in my territory and I did not see any other type of block used for sky-line and high-lead work; I will modify that for I have seen them put the bull blocks in a tree for high-leads, but they generally gave a great deal of trouble; this was when they first started operations; nearly always, it is my observation, that they were replaced with self-oiling blocks; when I left the trade in 1916 the self-oiling block was generally used for high-lead work and I had some camps that were using the self-oiling block for ground operation, for ground logging and yarding; when I left the industry in 1916 the adoption of the self-oiling block was increasing; I am familiar with the problem of the use of the grease cup block in connection with high speed engines from my personal observations in the woods, and while the grease cup block could be used for high speed operations, it was not considered practical; in view of the self-oiling block the grease cup block was not a practical block.

UPON CROSS EXAMINATION:

While I handled the Gilchrist block from 1914 to 1916, I sold quite a few of the large self-oiling blocks, probably 20 or 24 of the large 24-inch blocks which weighed 700 to 1000 pounds; I understand the 36-inch blocks used in the sky-line system will weigh around 1400 pounds; I am familiar with the construction of blocks to some extent; I am familiar with the construction of the Gilchrist block and understand that it has a cored oil reservoir in the side; before answering whether the Morgan reservoir corresponds to the Gilchrist reservoir, I would have to know more about how the Morgan reservoir was put together, if the chamber is cast integral in the side I should say it corresponds to the Gilchrist reservoir, not like it, but the principle is similar. I would say that any liquid placed in the Morgan reservoir would flow through the pin and find its way to the bearing surface of the sheave; it would make no difference whether the reservoir was cored or not; in any construction the oil would flow down by gravity; gravity would act exactly the same whether using a cored reservoir, or whether a reservoir was attached; we made blocks with swivel cross heads removably connected with two pins so that you could draw one pin and hinge the top over, the gooseneck or shackle type was removably connected in the same way, that has always been the custom so far as I know; the pin which I described in the first block manufactured under my supervision was a shouldered pin with an axial hole with a cross bore to the bearing surface,

with the oiling arrangement outside; I never saw an elbow similar to Defendant's Exhibit "C"; I have seen blocks with elbows for oiling purposes in the woods; I never saw anybody oil them; have seen them in operation, but never saw anyone oil them; I sold the Puget Sound donkey engine; the Washington had a second motion engine that was faster than the Willamette engine; I don't recall what the speed was, but I hardly think it would have a speed of a mile a minute on the back haul of the line, not in excess of a speed of one quarter of a mile a minute; of course, that is very hard to determine, it all depending upon the speed the engine is running; have been in the Polson Logging Camps probably a dozen times and remember when they used to make the logging blocks with boiler plate sides hammered out.

"Q. I show you Defendant's Exhibit '3-X' for identification, and ask you if you recall seeing any of these blocks in the Polson Logging Camps?

"A. I saw—I couldn't say as that particular construction, but I believe the principle was very similar. When I was calling on the Polson Logging Company, my recollection—this is purely memory—was the fact they had a flange arrangement riveted on the sides here, and they had three or four—

"Q. Rivets?

"A. No, bolts. I said riveting. It was bolted on.

"Q. Was a reservoir, was there not?

"A. Intended for such.

"Q. Used as such, wasn't it?

"A. Why, Mr. ——

"Q. Just a moment; answer my question.

MR. PECK: Let the witness answer the question.

"Q. I am asking the question, not what 'Mr.' said. I asked if used as such.

"A. I never saw it used as such.

"Q. Do you know that was what it was intended for?

"A. That is what it was intended for.

"Q. How long ago did you see one of these blocks in the Polson logging camps?

"A. I don't just recall the date, but I would say it was in 1907 or 1908.

"Q. 1907 or 1908?

"A. Yes; this is purely memory; I have nothing to check from.

"Q. Do you know anything about how this block operates, the interior of it?

"A. Not a thing.

"Q. Do you know whether it had an axial bore in the pin?

"A. I assume it had; I never saw it. I couldn't say.

"Q. You knew it did have a reservoir bolted on, or riveted on the side.

"A. Had a container.

"Q. For oil?

"A. Intended for oil.

"Q. And the whole would indicate that was used for liquid oil, would it not?

"A. It would."

(*Transcript of Testimony, pages* 396, 397 *and* 398.)

UPON RE-DIRECT EXAMINATION:

Referring to the Morgan block as shown by Defendant's Exhibit "BB," I would say that the block was not practical in measurements and general design; logging blocks in the woods suffer hard service and a block of the Morgan type in the light of the present art as shown by the self contained chamber, with a chamber that is stuck on the outside to receive knocks and blows, would be impractical in logging camps; the same thing is true with reference to a block of the type of Defendant's Exhibit "3-X," for identification.

UPON RE-CROSS EXAMINATION:

If I was ordered to make up a block with an oil reservoir, I would use a full cast construction; if the block is to be used for logging service it must be a cast side; from the standpoint of a machinist, if I was to construct a block, I would have to know what class of service it was to be used for; then I could give you some idea of what I would consider practical for that particular thing; if for a logging block, I would consider that it would call for a cast steel block, and if the order came before there were cast sides, I would consider it an impossibility; in 1902, before I saw any casting, I could have constructed a logging block with a swivel that would have been practical for the type of logging equipment that they had at that time; a practical oil chamber cannot be constructed on a block side without casting it integral with the side because there is no way of protecting it;

no one has ever been able to fasten a reservoir upon the side so that it would be as secure as if cast in the side; I could not do it; whether a side made out of boiler plates with pieces properly secured with bolts or rivets would stand more blows than a casting, depends on the nature of the casting; that it a matter for a metallurgist; a casting properly annealed and heat treated will stand as much of a blow as wrought iron or steel; castings in logging block sides as now manufactured would stand as much of a blow as the sides of Defendant's Exhibit "3-X," for identification; a quick blow has a tendency to crack anything; a quick blow sets up a physical strain in wrought iron as it does in casting; in an indirect way I know something about the factor of safety in connection with stresses and strains of materials; without elongation on a straight pull, flanged steel is usually figured on a strain of 60,000 pounds to a square inch; with reference to the question of blows or jerks I do not know the factor of safety but would have to refer to a text book; I don't even qualify as an expert and that is strictly an engineering proposition; I don't recall having seen a logging block break but have repaired them after they were broken; if the oil chamber were cast, it would be an integral part, would be a box section, would add materially to the strength of it; parts of boilers are cast, but I don't know why they do not cast the whole boiler; I am not a boiler maker; boilers are fastened together with rivets with the effect of welding the parts together; I don't think the boiler making business is comparable to the block making

business and I don't think I should be called to make an answer of comparison; I do not think that a boiler plate with less thickness than used in castings would stand as much strain, but it would if of the same thickness.

TESTIMONY OF JAMES BRAZEL, called as a witness on behalf of the complainant in rebuttal.

Age—48 years; residence—South Bend, Washington; occupation—logger in the State of Washington for the last 30 years; I started in the logging game with a job of greasing the skids and blocks and worked at all the different kinds of jobs in the logging camps up to superintendent of a camp and have owned a part interest in different camps; have been foreman and superintendent of camps in an executive capacity, for the last 15 years, and during that time have logged fifteen to twenty million feet per year.

The first logging blocks we had were constructed of boiler plate made in the camp by the blacksmith, consisting of two shells with straps on the sides forming the ears, a cross head, pin and sheave, oiled with a squirt can through a hole drilled angularly through the straps to the pin; in 1902 or 1903 the Bouse block came into use, which consisted of two sides and a pin, with the pin drilled lengthwise and a plug in which we used compound; the compound or grease was forced in by screwing down a plug under the same principle of pressure found in grease cups on a modern automobile; the grease cup block was attend-

ed by men who looked after them in the woods, who were supposed to go around and screw the plugs down every so often, according to the amount of work they were doing; if the blocks were under heavy pressure, the plugs were screwed down a good deal oftener than on a light draft; sometimes the men would forget to screw down the plugs and we burned up the blocks; we had more or less trouble with all that kind of grease cup blocks; when the block stopped we generally took it down and got another block to hang in its place until we got it fixed; until the block was replaced the crew that was working around the engine was practically doing nothing.

I first heard of the self-oiling block in about 1909; Mr. Gilchrist showed me a model of his self-oiling block; I couldn't say exactly the time, but I distinctly remember in 1911, after he got his blocks out, that I bought some of his blocks; it was before he got his patent out, I think about the Fourth of July in 1909 that I saw his model and we were talking about it; we are now using the self-oiling type of blocks of the Gilchrist type and do not use any other; a man couldn't sell me any other type of block now, the other type of block has gone out of date; the advantage of the self-oiling block over the grease cup or former types of block is, that when we move a setting we fill the block and don't bother again until we take it down; it is in there for that setting; the Gilchrist blocks will hold oil for a long time in operation; the first block I put up was a Gilchrist block

and we hauled somewhere in the neighborhood of about fifteen hundred thousand feet of logs through that block and it was up for six weeks; in taking it down we took it apart to see how much oil there was in it and it was about one-third full; during that six weeks the block was in continuous work every day; I figure that the self-oiling blocks hold sufficient oil for any one setting and I never figure on oiling the blocks on one setting; of course, it might be possible, a man would have to oil the blocks more than once in a setting if he had a great amount of timber, but I never had that much timber.

If you have to go up in a tree to oil a block, it would take a man probably about half an hour, to pull him up there and put the oil in and take him down; while this oiling was going on that part of the outfit would have to be closed down; we usually have one man in the camp who is called a high-lead man for that kind of work and we pay him extra; the work of oiling the high-lead blocks isn't a job for everybody to do; only now and then you get a man to do this kind of work; they require large wages.

The type of self-oiling blocks has practically displaced all other types of blocks entirely, will in time; a good many outfits have discarded the other blocks altogether; I suppose some of the smaller outfits are still using the old type of block; a good many of them had this rigging bought and they hated to throw it away, but as it goes out of commission they replace it with the self-oiling blocks.

Have been familiar with the high-lead and skyline systems of logging for the last three years; the high-lead system has come to stay and I believe eventually it will be all high-lead and high-line hauling.

When I first came to the State of Washington logging was done with an ox team; the first donkey engine I saw was along about 1898, a small engine called the Dolberry; they kept increasing the speed of logging engines from that time on; the next type with two drums I saw in Seattle in about 1900; as they increased the size of the logging engines, they increased the speed of them, and about 1905 they got a pretty fair speed on their small engines; we always had more or less trouble with the oiling systems of blocks until we got the self-oiling blocks; before the self-oiling block came there was always a demand for a better system of oiling and a great many men studied on it and got out different rigs, but the compound system seemed, for five or six years, to be the only system we could get that would come anywhere near giving us any satisfaction at all.

Have used the Mallory type of self-oiling block and it is the same block as the Gilchrist block so far as I could see, outside of a few minor changes.

UPON CROSS EXAMINATION:

In the Mallory block the oil enters the axial hole of the pin through a radial hole, while in the Gilchrist block it enters through the end of the pin, and there is a distinction in that regard; some of the blocks

have one and some have two reservoirs and the sides are interchangeable; the sky-line Mallory blocks which we use have two reservoirs; the Gilchrist blocks have two reservoirs, the kind he is putting out now; I couldn't tell whether Mallory or Gilchrist made the first high-lead block; the first one I saw to take notice of with two reservoirs was the Gilchrist block about three years ago; that was the first block I bought myself and put up.

The main trouble with the first blocks we used with boiler steel sides was the oiling system; under the strain of the logging work and the moving donkeys, the brass bushings would squash out, consequently it would rub against the sides of the sheaves, cut the brass, fill up the oil holes, and you couldn't get oil to the pin, consequently the block burned up; I remember when the long bearings were introduced and my understanding is that they were put in to do away with the trouble of squashing out the bushings; the long bearings had a tendency to overcome the squashing out of the bushings; don't recollect seeing boiler plate blocks with a long bearing; there were blocks of the Tommy Moore type with a very long bearing; have seen one of these boiler plate sides pull all to pieces; have seen the sheave stripped right out, tear the sides right out, nothing uncommon; that was due to an excessive load which will happen sometimes with any kind of a block; have seen the boiler plate sides twisted out of shape, bent up, but they don't break unless you get an excessive strain on them, they tear them to pieces; can't say whether the boiler

plate sides would break as readily as a cast side; have seen the cast sides twisted out of shape pretty badly and still not break, in fact, I have seen them bent, twisted right over; my opinion is that the breakage of the boiler plate block about offsets the breakage of the cast block, don't think there would be much choice between the two on the question of breaking, knocks and blows in the woods.

All the blocks that I have used for the last twenty years have had removably connected tops, cross heads, shackles, that by removing a cotter pin and drawing out a pin you could throw the top back; the shouldered blocks have been in use for twenty years; I have seen some haul-back blocks with recesses in the sides with very long bearing.

I have seen blocks like Defendant's Exhibit "C"; these blocks came out for the purpose of using oil, but we loggers didn't figure that was a practical way, for when the block is run at high speed it gets hot, the oil gets thin, and runs right out of the block so that the block burns up; it won't do it so much with a grease or compound; the hot block doesn't affect the compound unless you put pressure on it; Defendant's Exhibit "C" is constructed for either soft oil or comound with pressure; the elbow blocks were put out as soft oil blocks; the plug that fits into the elbow is a straight plug; that is the kind of a plug we used; we had a plug made to screw right into the couplings the same size all the way, those have been made for years; that is what has been used in

any compound cup; I never used that elbow, I took them elbows off and put on a sleeve and filled it up with compound and put a plug in; don't know as there would be a great deal to prevent the oil from running out of the block any more than out of the reservoir block if you had any oil there to run, but the elbow block wouldn't hold much oil; the fact of the matter is, we use them haul-back blocks in all kinds of work and logging business; we use them for instance in moving the donkey, they are not hung up in a tree all the time; those elbows wouldn't stay on there fifteen minutes if you started to move a donkey in the mountains; the haul-back blocks are used for moving the donkeys just the same as they are used hung up in a tree; they are not the main block in moving the donkey, we have what we call the moving block for moving donkeys, at the same time, if we are taking a donkey in the mountains, we probably would stretch out four or five of the haul-back lines, to hold the donkey from running away down the hill.

Some time along in 1909 I talked to Mr. Gilchrist about this patent, he had a patent out for it; I was in Mr. Gilchrist's shop in an ordinary business way buying stuff for the camps; I didn't think anybody was assisting him in planning his self-oiling block; my experience with Gilchrist is that he won't take anybody's advice with regard to things; you can't impose your ideas on Gilchrist because he has ideas of his own, and you can't change them.

The highest speed donkey I know of is probably a thirteen by eighteen Seattle and the mean speed all depends on the engineer that is running the donkey; I judge that the haul-back line could be put back in the woods at the rate of a mile a minute if a man wanted to run the engine that fast; the main line that hauls the load could probably haul logs at a thousand feet in a minute and a half, if they didn't hang up; that would be about as high speed as practical.

I don't know who pioneered the sky-line mode of logging in the Pacific Northwest; it came about gradually; we first started in to use it by moving the donkeys up on a hill, yarding up hill instead of down hill; I remember seeing the models and cuts of the sky-line system in a catalogue; the idea was carried from one man to another; I changed from the old style to the sky-line and high-lead system and didn't consult with anybody particularly, knew that the thing was in operation and went to the Mason County Logging Company in the Black Hills to see it in operation; had seen illustrations in catalogues but can't say whether I got my idea from that or somebody told me about it; I had heard about this high-lead system and how it worked, talked to people that had been actually engaged in it.

Prior to the introduction of the high-lead system we used blocks weighing from 30 to 1000 pounds; the thousand pound block was the Tommy Moore; we would hang these big blocks up about 30 or 40 feet, long before the high-lead system was intro-

duced, never used any of the large type of self-oiling blocks before putting in the high-lead system; when I changed to the high-lead system of logging, I changed to the self-oiling style of block; prior to that time I was using the old style of blocks as yarding blocks and haul-back blocks. The high-lead system had been used more or less for years before I adopted it; I have a man in my camp to look after the high-lead blocks when I can keep him; but they are not always available, sometimes I borrowed a man; it cost me $50 to get the man to go up and change one block; we don't inspect these blocks every few days, we never inspect the self-oiling blocks unless we want to change them; it has been my experience that the self-oiling blocks have run under continual work for six weeks without oiling.

TESTIMONY OF H. J. OWENS, called as a witness on behalf of the complainant in rebuttal.

Age—57 years; residence—Raymond, Washington; occupation—a logger for the past 22 years; first experience with horses and then about 2 years later, in 1900 or 1901, I went to logging with a donkey engine and have been logging with a donkey engine ever since; have been manager of logging camps for the last 20 years; logged for myself a long time as an independent logger, then went with the Owen Logging Company which is putting out about two million feet of logs per month; have been manager of that company for the past 16 years.

In 1904 we used the Gilchrist logging block which was then oiled with an oil can through a little hole drilled in the side of the shells intersecting with the pin; the last block we used was the grease cup block made by Mr. Gilchrist and the next type we used was the Gilchrist self-oiling block, which I first bought in March, 1910; he gave me a block at that time to try out; he had then made application for his patent; since 1910 I have used the Gilchrist self-oiling blocks; I think we have a Bouse block in the camp and one Mallory self-oiling block of the same type as the Gilchrist block; we use nothing else but self-oiling blocks in our camp now; I know from talking with other loggers in Washington that they are all adopting self-oiling blocks; the outstanding features of the Gilchrist type of block are the long bearing pin or hub, the self-oiling device and the hinged top; the long bearing gives less pressure on the pin and the brass bushings by distributing the pressure over greater area; the blocks which we had prior to the self-oiling blocks were the best we had, I don't know whether you would call them efficient or not, but they were the best blocks we had and we considered them good blocks in those days.

UPON CROSS EXAMINATION:

There is always a demand for something better if we can get it, and progress is being made in all methods of work—of logging and in equipment of all kinds; a large portion of this advancement is due to the requests of the loggers in the woods; improve-

ments in logging devices I believe have come as a result of the requests of the loggers, that is, I think that they have come from observation; the logger in the woods knows what is needed and he tells the equipment man what to furnish; when I first started in the logging business we had blocks hammered out of boiler sides and they were tolerable, fair sides in those days; we didn't have much trouble with the sides, the trouble was mostly with the cutting of the pin, wearing out the pin or the bushing giving way, no particular complaint of the sides; the case side is more subject to breakage than the boiler plate side, I think; all the blocks which I have used have had removably connected tops, also shouldered pins; in 1905 or 1906 I used the combination of oil going through the pin with a grease cup on it, but don't think I used pins with a long bearing as soon as that; the sides are held together either by the cross head or shackle at the top or by an axial pin through the center; the axial pin holds the sides together either by a screw or a threaded portion of the pin, or by a burr threaded on the outside; they stood the knocks and bumps in the woods very well, if you riveted a piece on the outside any blow which would knock that piece off might or might not knock the sides apart, but, of course, would be liable to spring the sides, possibly; the side plates of a block; the side plates of a block only have two points of contact near the top and at the axle; two pieces of plate can be more securely fastened together where they come in contact all around the outer edges, than where

they only come in contact in two places; you could rivet a piece on the outside of the shell that would be as secure as the position of the connection of the two sides; there would be no great difficulty about a riveted oil reservoir being knocked off but there is great chance of its leaking.

"Q. Be a chance for leaking?

"A. Yes.

"Q. If got bent out of shape a litttle?

"A. Don't require much bending; take a riveted oil cup—

"Q. You know how they pack joints—steam joints?

"A. Yes.

"Q. And how they pack the sheets in their places under pressure, where no leakage? They put in what is called gaskets or rubber packing?

"A. Yes, sir.

"Q. If gaskets or rubber packing where fastened on, there wouldn't be great danger of leakage, would there?

"A. Might not leak right on the start, but I think the usage of the block would cause it to leak.

"Q. You know the way boiler plate is secured together in making boilers?

"A. Well, I know practically, yes.

"Q. Makes a practical weld, doesn't it, the way it is put on?

"A. Yes.

"Q. The rivets going through, and if a piece of plate were attached to the side of a block side, of

boiler plate, in the same manner, do you anticipate you would have much trouble about leakage?

"A. Yes, I think there would be.

"Q. What is that?

"A. Might be liable to leak, yes.

"Q. You think a blow would cause that to leak before it would break the sides apart?

"A. Yes, sir.

"Q. And still not break the sides apart?

"A. Yes, sir, I think so.

"Q. Practically all of your blocks are Gilchrist blocks?

"A. Yes, sir.

"Q. And always have been?

"A. Yes, sir.

"Q. You don't know much about any other kind of block, do you?

"A. No, sir, don't pretend to.

"Q. You never had a block with an oil reservoir riveted on the side that you have used, then?

"A. No, sir; I think we have—I did have a blacksmith, man by the name of John Smith, put a patch on a block.

"Q. A reservoir?

"A. Yes, I guess you call it a reservoir.

"Q. An oil container?

"A. But it wasn't a success.

"Q. When was that done?

"A. That was along about—somewhere between 1909 and 1910; may have been 1910; I wouldn't say for sure.

"Q. Have you ever been in any Polson logging camp?

"A. No, sir.

"Q. You don't know anything about the old Polson logging block then, with an oil reservoir

"A. No, sir.

RE-DIRECT EXAMINATION:

Questions by Mr. Peck: You say that block you did experiment with, with the blacksmith putting a patch on the side, was not successful?

"A. No, sir.

"Q. What was the matter with it?

"A. Leaked.

CROSS EXAMINATION:

"Q. Did you put a gasket in between?

"A. It was packed with wicking.

"Q. Packed with wicking? I mean between the sides, where the riveted plate?

"A. Packed with wicking.

"Q. That leaked before it was ever banged around at all, didn't it?

"A. No, it seemed to hold all right on the start, but woudn't stand the banging."

(*Transcript of Testimony, pages* 434 *and* 435.)

It fed the oil all right through the end of the pin; the operation of the lubrication was successful, only it leaked; the Gilchrist blocks were successful when they first came out.

UPON RE-DIRECT EXAMINATION:

The Gilchrist block didn't have the Z-shaped guard when it first came out; the guard was of advantage in that it kept the line from fouling on the block; one can get along without the guards in using lighter blocks, but it is impractical.

UPON RE-CROSS EXAMINATION:

Never had a block with the bolt and barrel form of guard, had the H-shaped guard similar to Defendant's Exhibit "V"; haven't seen many of the Z-shaped guards but I think there was one or two blocks in the camp with Z-shaped guards, most of them have H-shaped guard; I consider the H-shaped guard a better guard than the Z-shaped guard, it protects the block in keeping the sides from spreading apart and also from pushing in. I think the H-shaped guard will stand a bigger strain on compression and tension than the Z-shaped guard. The connecting member in the H-shaped guard performs practically no other function than that of holding the compression links together, not particularly any strain on that, and the line can't damage that in any way. I don't suppose the connecting member could act as a guard for it performs no function except holding the compression links together.

TESTIMONY OF RALPH V. PEARCE, called as a witness by the defendant in rebuttal:

Age—60 years; residence—Centralia, Washington; have followed the logging business nearly all my life;

I worked in camp for wages and have owned camps; went to work in the camps in 1887, worked until 1903 and then stopped until the steam logging came in; opened up camps for myself in 1907, worked until the fall of 1909, stopped until the spring of 1911, and opened camp again, and worked until 1913; in 1916 bought a donkey and logged until the close of the war.

Have been familiar with logging blocks since I was a boy; the first I ever heard of the self-oiling type of block was in 1912, which was the Gilchrist block, and from that time to this all the blocks which I have used have been the self-oiling Gilchrist type; I would buy no other type of block because the other blocks give too much trouble and you don't have to watch the self-oiling blocks so much; my experience has been that you can leave the self-oiling blocks and know that they will be running without depending upon some human agency to oil them or turn down the grease cups; the first self-oiling block I bought was a trip-line block and my instructions were to hang it up and let it alone for three weeks; I did so and after continuous operations for three weeks I examined it and it had oil in it; have done high-lead work and owned three high-lead blocks; in my judgment the high-lead system of logging has come to stay; I wouldn't think of logging at all any more in the old style way on the ground; not only in rough ground, but in soft ground, the high-lead and skyline systems of logging are particularly adapted.

UPON CROSS EXAMINATION:

Never used any blocks with elbows for oiling; I had all Gilchrist blocks when I sold out; part of these Gilchrist blocks had guards on them like Defendant's Exhibit "V" with two compression links extending directly from the pin on the one side and the pin on the other with a connecting piece between the two; in case of a heavy load on the block with the tendency to pull the sides together, I don't know whether the H or the Z-shaped guard would be better, the supporting piece in the center ought to be a pretty good brace; the H-shaped would be a better guard than the Z-shaped guard; never used a Z-shaped guard that I know of; if it came to the point of spreading the sides the element in the center of the Z-shaped guard would have very little utility; all the blocks which I have used have had removably connected or hinged tops, and I don't recall any block that I ever used but what had some way of taking the line out and putting it in without taking the block to pieces. The first long pin block that I ever saw was the Skookum in 1907 or 1908. It had to have recesses in the sides of the shell with projecting hubs in order to have long bearings; it had an axially bored pin with a radial hole to the bearing surface, I think.

TESTIMONY OF B. A. WHEATON, called as a witness on behalf of the complainant in rebuttal:

Age—53 years; residence, South Bend, Washington; occupation—building sleds for donkey engines and mounting engines since 1907; the business of

selling donkeys and putting them in the woods has been my main business since 1907, removed these donkeys with logging blocks and lines; have moved donkeys eight or nine miles at times with a moving block; a moving block is a block with a specially large sheave built on the same lines as a yarding block, excepting that it is larger and heavier and is universally a gooseneck or shackle block; when the donkey is moved, the block is permanently fastened to the tree and the bight of the line is through the block; the grease cup type of block is not very successful; the grease cup elbows are hard to keep on as rough as you use moving blocks; when setting the rigging to move a donkey, you have to have some way to get your moving block out, and you generally take it out with a haul-back block so that the moving block is packed through the snow, mud, brush, or whatever happens to be in the way without reference to what shape it is in; have used the self-oiling block in suit, and it is a far superior block to the grease cup block in that it takes less attention, is more efficient and stays lubricated better; any block with a recessed hub stays clean on the bearing better than a straight sheave block and the more dirt you keep out of the bearing the less wear on the pin.

Am familiar with the logging equipment used in the western part of Lewis County, Washington, and Pacific County and part of Grays Harbor County, where I worked moving donkeys and in these camps it is the fact that the self-oiling type of block is al-

most universally displacing the old grease cup type of block; there are some grease cup blocks but the new blocks are all self-oiling blocks.

UPON CROSS EXAMINATION:

Am only speaking of the use of blocks in the locality where I am acquainted; an elbow block with recessed sides would exclude the dirt from the bearing just as effectively as an oil chambered side with the recesses, and the lubrication would be just as good as long as the oil was there, the difference would be that the reservoir and the pin in the elbow block would not be as large as the reservoir in the oil chambered block and you would have to oil more frequently, a matter of convenience to save from oiling so frequently; moving blocks are close to the ground where you can oil them if you happen to see them in time; have seen several different makes of blocks with lubricating sides, and many of the leading logging supply houses make moving blocks with oil reservoirs in the sides; with the fast donkeys we have I think the haul-back line moving so rapidly created one of the first demands for the auto-lubricating or self-oiling blocks. The blocks which have been used in my vicinity since 1907 have had removably connected tops, either a cross head or a gooseneck shackle so that they could be readily disconnected; have seen blocks with guards and some of them have been an H-shaped like Defendant's Exhibit "V"; have seen a few guards of the Z-shaped similar to Defendant's Exhibit "W," but not very many; most of the guards

were of the H-shape; the main function of the guard is to keep the line down so that it will not fly up into the gooseneck shackle; most any kind of a guard will serve that purpose; the bolt and barrel form of guard would serve that purpose but would be hard to get in and out; you seldom release the shackle until after you have thrown the line out; you can't release the line of your sheave without releasing the shackle; I know of no advantage in having a guard stay in place when you release the shackle.

TESTIMONY OF J. E. KELLY, called as a witness on behalf of the defendant in rebuttal:

Age—32 years; occupation—moulder serving apprenticeship with Willapa Harbor Iron Works, which was completed in November, 1909; while an apprentice I worked on the Gilchrist self-oiling block, first started to do some work on that in September, 1909, under the instructions of Mr. Gilchrist, working from a wooden pattern which Mr. Gilchrist had made; the first pattern that he gave me I didn't get a very good casting from and he had another made by a pattern maker and I got him a casting that was good for all purposes that he wanted, in about the first week in October; I saw the first block assembled which was sent to the patent office, I believe before my time as an apprentice was up; I heard that the block was sent to Snow & Company, patent attorneys.

Witness identifies an exhibit as being half of the block side made by him before the middle of November, 1909; this block side was made for the same purpose as the other, except that the other had one ear

Exhibit introduced and marked "Complainant's Exhibit 32."

Witness identifies a guard marked "121-CH," with the words "Gilchrist Patent" on the same, as being a guard which he took off from a Stewart block which came into the Willapa Harbor Iron Works for repairs, being a type of guard made b ythe Willapa Harbor Iron Works.

"MR. PECK: I offer this in evidence.

MR. M'CARTHY: For what purpose?

MR. PECK: To show acquiescence. We have a right to show acquiescence of the manufacturing trade to our patent, showing the construction of the trade, interpretation of the trade.

MR. M'CARTHY: We object as incompetent, irrelevant and immaterial. No connection between the defendant and the Stewart Brothers. Shows no license on the part of F. B. Mallory.

COURT: Admitted for whatever it is worth.

Offered in evidence and marked Complainant's Exhibit 33."

(*Transcript of Testimony, page* 458.)

I saw the first Gilchrist self-oiling block assembled as a practical working block having one lug on the sides, between the first and the middle of October, 1909.

TESTIMONY OF CHARLES S. COREY, called as a witness on behalf of complainant in rebuttal:

Occupation—machinist; worked as a machinist for Willapa Harbor Iron Works in 1909 and 1910; saw the first self-oiling block assembled in the month of October, 1909; I fixed that date because the Alaska Yukon Exposition was held in Seattle in 1909, and when I came back from visiting the Exposition on the first of September, 1909, I saw the first pattern; the second pattern I saw about the first of October and the block was cast as quick as we could get the casting pattern and was then assembled; to my knowledge the first assembled block was shipped to Washington, D. C., leaving the plant somewhere near the first of November, 1909; went to work for Mr. Gilchrist in 1903 and worked for him until April, 1911, and again from September, 1911, to May, 1913, again from May, 1918, to date, and from 1903 to 1911 I know that Mr. Gilchrist was working and experimenting on a logging block.

"MR. PECK: Mr. Gilchrist, will you please withdraw. (Mr. Gilchrist leaves the room.) Mr. Gilchrist, the plaintiff in this case, about a year ago, suffered a cerebral hemorrhage and had what is known as a shock. He has also advanced heart disease and Bright's disease. He came up for the purpose of attending this trial, and participating in the trial, last Saturday night. Sunday morning I examined him in the office, and he became so incapacitated physically that I sent him to a physician. We have the physi-

cian here, who will testify as to his condition, by way of excuse for not putting him upon the stand."

(*Transcript of Testimony, page* 461.)

TESTIMONY OF DR. WILLIAM S. KNOX, called as a witness on behalf of the complainant in rebuttal, whose qualifications as a physician and surgeon are admitted by the defendant:

Am acquainted with the complainant, Mr. Gilchrist, and examined him first in May, 1919, and again two days ago in my office.

"Q. What is his physical condition as to the propriety of putting him on the stand and undergoing a strain, in this case?

"A. Well, in the first place, Mr. Gilchrist is 64 or 65 years of age. He has an advanced arterial schlerosis; what I mean by that is stiffening of the arteries. He has a chronic affection of the heart muscles, and also kidney change, which we call Bright's disease. In addition to that he had, a year ago, a hemorrhage in the left side of his brain, from which he has not fully recovered, as yet; and when I was asked as to whether I would consider it proper for him to testify I advised very strongly against it, regardless of what was at stake. I did that for the reason that any excitement as well as any severe physical exertion, might easily precipitate another hemorrhage, and cause death."

(*Transcript of Testimony, pages* 461 *and* 462.)

UPON CROSS EXAMINATION:

I referred to hemorrhage of one of the vessels of the brain, that is, apoplexy.

TESTIMONY OF J. C. PRENTISS, called by the complainant as a witness in rebuttal:

I was a blacksmith for Mr. Gilchrist from the spring of 1905 until May, 1910, and saw the first self-oiling block assembled of the type in suit here; this block was completed not later than the middle of November, 1909; I fixed that time by the fact that I left in the spring of 1910 and I know the block was completed in the fall before I left.

TESTIMONY OF CHARLES S. COREY, recalled by the complainant as a witness in rebuttal:

Complainant's Exhibit 7 contains all the elements of the first Gilchrist block assembled in the fall of 1909, the only difference being that the first block had only one ear on the oil side.

Am manager and superintendent of the Willapa Harbor Iron Works, which is an assumed trade name of Mr. Gilchrist, the complainant; the Willapa Harbor Iron Works is not a corporation.

Mr. Gilchrist has secured fourteen patents on logging equipment manufactured by the Willapa Harbor Iron Works, six of which are on logging blocks, two with reference to sheaves and four with reference to blocks.

UPON CROSS EXAMINATION:

The first block assembled in the fall of 1909 had one lug on the oil side and two lugs on the plain side, and the top or head piece had three lugs, two lugs on the one side and one on the other; and except for that one feature it corresponds with Complainant's Exhibit 7.

UPON RE-DIRECT EXAMINATION:

Since 1910 the Willapa Harbor Iron Works has been continually manufacturing the Gilchrist type of self-oiling block and the production of these blocks increased as time went on.

UPON RE-CROSS EXAMINATION:

The first block was similar to Complainant's Exhibit No. 7 so far as the oil chamber was concerned, the oil side was an enlarged portion, full size of the side; in our later design in high-lead blocks we confined the oil chamber to a narrow strip down the center of the side, the new design making a narrow reservoir from the lugs to the bearing.

TESTIMONY OF L. E. YOUNIE, recalled as a witness on behalf of the complainant in rebuttal:

Have examined the prior patents and various exhibits that have been introduced in this case to show anticipation, but I do not find all of the elements of claims 1, 4 or 5 of Gilchrist patent No. 977,613 in combination in any one of the exhibits here, or in the prior art; I do not find all the elements of the com-

bination of the first claim of Gilchrist No. 977,613 in the Morgan patent, but I agree with Mr. Reynolds, the expert of the defendant, that the Morgan patent of all patents introduced in evidence is the nearest approach to meeting claim 1 of Gilchrist No. 977,613; in the Morgan patent the interior oil chamber specified in Gilchrist is lacking; as I understand the term "interior," it means within the confines of the inside and the outside of the block side; the reservoir in the Morgan patent is not interior for the reason that I cannot find it within the confines of the inside and the outside of the block side and is not an interior chamber in the sense that Mr. Gilchrist had in mind, or in any sense; the reservoir on the Morgan patent is simply an oil receptacle attached on the outside by means of rivets and it has the effect of weakening the block side to the extent of the amount of material drilled out of the block side to make place for the rivets, which is of considerable moment if you count the number of rivets that are supposed to be used in that side, it takes quite a bit of material away. The Morgan block would not be a practical logging block because the abuse and rough usage to which it would be subjected as all logging equipment is from time to time, would incapacitate it, make the oil receptacle leak and it would be of no use; it is not necessary to break the side before impairing the use of the chamber for if it were subjected to a blow sufficient to loosen up the rivets, or turn up the edge of the applied piece slightly, the oil would run out, and you wouldn't have an oil chamber; if there were leak-

age at the top air pressure would be admitted which would materially affect the rapidity with which the oil would flow out of it, which I consider of very great importance in an interior oil chamber.

With reference to a comparison of costs in the production of the Morgan side and the Gilchrist side, let us take Defendant's Exhibit "T" for illustration; this side will weigh in cast steel about twenty pounds, which can be purchased for twenty cents a pound today; if you want to incorporate in one of these sides an interior oil chamber it will cost you about two cents a pound more to do so, which would be the first and last additional cost to install the oil chamber, or forty cents; the plain side would cost $4.00 and the oil reservoir side would cost $4.40; the outside piece of a Morgan block in the same side would cost as follows: six pounds of material at forty cents per pound —$2.40; sixteen rivets at five cents apiece—$0.80; machining the plate and drilling the holes and getting it ready to apply—$0.25; or a total of $3.45, making the Morgan block side of the size of Defendant's Exhibit "T" cost $3.00 more than the Gilchrist block side of the same size.

"Q. Now would you need any more additional material if it were properly distributed, to have an oil chamber side as contrasted with the plain side?

"A. Not an ounce; the same amount of material if properly distributed will make a stronger side with the oil chamber, than without.

"Q. What is a common illustration of that?

"A. Well, it is a well known fact in mechanics that a hollow member, like a piece of pipe, is stronger than a solid member containing the same amount of material, subjected to any strain, whether torsional or bending strain."

(*Transcript of Testimony, page* 472.)

Defendant's expert, Mr. Reynolds, stated that there was no consideration that governed the width of the sheaves of the pulley block; I do not agree with his conclusion for there are very definite considerations which I, as a designer of pulley blocks for sixteen years at the Willamette Iron & Steel Works, am familiar with as governing the width of sheaves.

"A. In the first place the width of the sheave is governed by diameter of the line which is supposed to be used on the sheave. In designing a block a matter of very first consideration is to keep the weight within certain limits; keep the weight as low as possible, and have material enough to stand the strain, but keep the weight down. That is what we all try to do, because these blocks are manually handled over ground that is very difficult for a man to get over. They have to be carried up mountain sides, up hillsides, over logs, and through underbrush; through gulleys and ravines, where even a man's footing is sometimes—it is difficult for a man to get his footing; difficult for a man to get over; these blocks often have to be carried. So you can see that it is a very important—it is important that we keep down

the weight within certain bounds, making the sheave no wider at the rim than just necessary to accommodate certain size rope. You can readily see that the only means left for us to avail ourselves to get a long bearing is to put in the annular recess. We can't build a sheave with a rim four inches wide, because we want a bearing four inches wide. If we want to use a one-inch rope in that block, we would make the rim one and a half, or one and three-quarter inches. Then put in an annular recess. This gives a long bearing; we haven't the big mass of rim and the big mass of block."

(*Transcript of Testimony, pages* 475 *and* 476.)

I find very close cooperation between all the elements in the several claims of the Gilchrist patent.

"Q. Will you please explain the cooperative relation between the parts of the block?

"A. Well, I find with the conditions existing out in the woods, where these blocks are performing the function for which they are built—we go out in the woods and find this block suspended by a wire sling to some tree or some stump, and the line is running over the sheave with a load of some dimensions, we don't know what. The block in the first place is suspended by a removable top, which not only suspends the block, but is performing the function of holding the sides in position. The pin is assisting and cooperating with the top to hold the sides in position. The shoulders of the pin are fixed against the inside faces of the sides; pin sheave rotably

mounted thereon, is turning on the pins. I find the ends of the pins terminally mounted in the sides, with the axial opening communicating with the oil chamber, conducting oil through the axial opening and through the radial bores to the bearing surface of the pin. The sheave in its rotations is wiping the oil away from the axial opening or the radial opening, and distributing it uniformly over the whole extent of the pin bearing, the sheave running normally and freely between the sides. The oil chamber is at the same time cooperating; it is retaining the oil, holding it, and feeding it to the axial opening in the pin, as required, as it is carried away by the motion of the sheave. I find if the sheave would stop—

"Q. Just a moment. If the removable top or any portion thereof should be so weak as to permit of the sides to approach each other, what would be the effect?

"A. The first effect might be to put a frictional load, and that vice like action on the side of the rim, and tend to stop—

"Q. The rim of what?

"A. The rim of the sheave. It might not stop it, but applied with sufficient force might stop the sheave from rotating.

"Q. What effect yould that have upon the oil system?

"A. It would stop the whole operations; would stop the whole function of the block.

"Q. Of the oiling system particularly. Would any oil be fed to the pin?

"A. No, the oil would not be fed to the pin, or distributed over the bearing surface; the sheave is stopped.

"Q. Might be a little oil fed to the pin, but it would not be distributed?

"A. A little oil might run through the bearing and drop out—off the block.

"Q. It wouldn't be distributed over the bearing?

"A. Because the sheave is stationary; the sheave is not moving enough to distribute the oil over the bearing surface.

"Q. Then you find that all of the parts and all of the elements of that block are in cooperative relation, one dependent upon the other?

"A. I find them all in cooperation, each one depending upon all the others.

"Q. You regard that pulley block as a unitary integral?

"A. I certainly do. If you have in mind the function for which the block is designed."

(*Transcript of Testimony, pages* 476, 477 *and* 478.)

I have examined Defendant's Exhibit "Y," a Mallory block, and find that it contains substantially the elements of claims 1, 4 and 5 of Gilchrist No. 977,613; I would say that it is an exact copy of a block described by claims 1, 4 and 5 of the Gilchrist patent No. 977,613.

I have also examined Defendant's Exhibit "X," the other type of Mallory block, and find that it also contains all the elements shown in claims 1, 4 and

5 of Gilchrist No. 977,613, but there is a slight difference in the pin, the axial opening communicating with the oil chamber by way of radial connection; this difference does not in any way affect the question of infringement; the pin has two shoulders and is terminally mounted in the sides; the axial opening communicates with the oil chamber through radial holes rather than through the end of the pin; the pin is terminally mounted in the side, the only difference being that the thread is on the outside fastened by a nut; it doesn't make any difference whether you put the threads in the sides or have them in the nut on the outside.

There is another very slight difference in the closeness with which the hub fits in the Mallory and the Gilchrist blocks; in the Mallory block it does not fit quite as deeply, quite as closely as in the Gilchrist block, which would thus impair its efficiency as a dust protection.

UPON CROSS EXAMINATION:

I don't claim to be an expert on patents, but I own seven or eight myself and have spent something like three or four thousand dollars getting patents and know something about them; a combination in patent law, as I understand the term, is the putting together of elements that have different functions, with the major function in view, using the different elements and their different functions, to perform the major function. I don't understand that there must be a change in the function which an old element

performs in order to give you a combination patent; in fact, I know there doesn't need to be any change, nor a new result obtained by each element, but if the combination performs the major function in a more satisfactory manner, it has been held that it is an invention; these elements of the several claims of the Gilchrist patent as far as I have been able to find in examining the patents and exhibits here produced are not all applied together in any one patent; I believe that all of the elements have been found separately or in different combinations except the interior oil chamber; the Ludford patent discloses an interior oil chamber and I do find all of the elements performing like function in the prior art; if the block side were cast on in the Morgan patent, I would consider that would fall in the Gilchrist claim; the distinction that I make between the Morgan patent and the Gilchrist patent, with reference to the element of an interior oil chamber, is that the Morgan patent is riveted on and in the Gilchrist patent it is cast integral in the side; the method of fastening the pin in the side as shown n Mallory block, Defendant's Exhibit "X," is equivalent to the method described in the Gilchrist patent; I consider the fact that the addition of the oil chamber in the Gilchrist block makes a stronger side is a function that belongs to the Gilchrist patent; it makes no difference whether the oil chamber extends over the whole side or is confined to a narrow strip, one is the equivalent of the other. The block side of Complainant's Exhibit 8 would be just as strong as the block side of boiler

plate and might be a good deal stronger; in the Morgan block the drilling out of the holes to put in the bolts and rivets weakens the side and the side is weaker than it was before the holes were made and the additional piece riveted on; heavy construction work, as large bridges, etc., are built up of strips riveted together as a matter of convenience, I don't believe it would be possible to cast the Morrison Street Bridge in one piece; two pieces of metal riveted together and combined are stronger than one of them alone; if, in the Morgan block side, you made use of both pieces to take the strain, then the side would be stronger than it was before the chamber was riveted on; but in the Morgan block the side riveted on is not located so that it takes any partof the torsional or tension strain.

I can't conceive of the tension strain which must pass between the head and the pin, ever taking this circuitous route out through this metal, when it can go down through here; there will be no strain on this metal here until this is ruptured, or passes the elastic limit.

If the block side were broken then the side which was riveted on might help to hold it; there might be enough metal put in the piece which was riveted on to hold the block, after the block side was broken.

Have had practical experience in the block business and know that there is trouble with a cored out casting by reason of the sand loosening up; in the cast side you might get some sand through the passages over on the bearing that would have a tendency

to cut the bearings; if you have a boiler plate riveted on to the side of the reservoir you wouldn't have any sand but you might have chips or scale, or something equivalent to sand; you can thoroughly clean your casting by pickling it out with acid; I have heard the complaint of loggers that the blocks have ground out from sand cores; I have designed blocks recently with the core in such shape to make it easy to clean out; the core sand is a disadvantage but I don't hold that it is hard to clean out.

Witness' attention is called to an advertisement in the Timberman of Skookum blocks, entitled, "The Inside Story of the New Skookum Blocks. Note the sand-proof steel reservoir securely welded in the block side." The same was introduced in evidence and marked "Defendant's Exhibit 3-Y."

Referring to the block shown in the last exhibit I do not think that it makes as good a reservoir as the Gilchrist reservoir, it is built up of thin galvanized iron or something like that; I do not think that kind of a reservoir would stand abuse out in the woods; I had nothing to do with designing this block; there were no rivets used to place that reservoir in place and the side has not been weakened, nor is there any projection to be knocked off.

"Q. Do you consider this illustration shown in Defendant's Exhibit 3-Y, answers all of the elements of Claim 1 of the Gilchrist patent?

MR. PECK: Objected to as incompetent, irrelevant and immaterial. That is not in the prior art, and is not claimed in the prior art.

MR. M'CARTHY: We are testing out the man's ability to show what elements are in.

"A. I think that this block conforms to all the elements in the Gilchrist patent, Claim 1."

(*Transcript of Testimony, page* 492.)

If the reservoir were welded on in the Morgan block I would say that it would conform to the claim of the Gilchrist patent; if the Gilchrist top were a solid top instead of a removable top, there would be no difference in the function of the oiling device while in operation; the oiling device only operates while the block is in operation; a solid top would make no change in the oiling function; the removable top co-acts and helps the oiling devices performing their functions in that it is cooperative with the pin to hold the sides in position, although any solid top will do the same thing; the function of the removable top is not necessary at that time, it performs its function at another time, it performs a different function, that of removing the line from the sheave and removing the block from its shackle, has no connection with the oiling of the block when removing the block; it has connection with the oiling of the block when the block is running as it holds the sides out in position; the solid top would hold the sides in position but it woud not do the other thing; they are independent functions; the function performed by the removable top is old in the prior art; the oil would feed upon the sheave in the same way

from an oil reservoir formed by an elbow or a barrel as shown in Dfendant's Exhibit "D"—the same way that it would from an interior reservoir of the Gilchrist patent, the difference being the amount of reservoir capacity, provided, of course, if you could keep the elbow reservoir on the block.

"Q. I understand you to say that. Now while you were examining the Mallory block, you called attention to the fact that there was a slight difference in the hole of the pin in one of these blocks, in that the hole communicated with the oil chamber by entering the side instead of entering an axial bore at the end of the pin, so that the oil fed from the chamber through the hole in the side of the pin then through the central bore of the pin, and out again through the radial hole on the bearing. I understood you to say that was practically the same thing, amounting to an equivalent of the oil passing directly through the end of the pin?

"A. Yes, you have the right understanding.

"Q. You don't understand that any new element or any real element which could be claimed as a new element, is introduced by that change, do you?

"A. No.

"Q. In fact if that oil were required to take a circuitous route and pass through two other holes before passing through the center of the pin, if it were so it could feed readily by gravity, and communicated so it would feed rapidly through the oil chamber to the bearing surface of the pin, it would be a mechanical equivalent?

"A. Might get the oil there if passed through twenty holes.

"Q. Would be a mechanical equivalent?

"A. No, would not be a mechanical equivalent.

"Q. How many holes do you have to have before it would vary?

"A. This claim reads very clearly that the hole in the end of the pin communicates with the oil chamber. You know what communicate means, as I understand it.

"Q. What do you understand?

"A. Webster's dictionary says: to communicate, one to open into another. Now if the pin and the hole in the pin must communicate with the oil chamber, then the pin must open into the chamber.

"Q. That is an axial opening described in the Gilchrist patent?

"A. The opening—

"Q. Axial opening, is it not?

"A. In the pin.

"Q. Axial opening, is it not?

"A. Opening into the chamber.

"Q. We will read from Claim 1: "A bearing pin terminally mounted in the sides, and having an axial opening communicating with the chamber." That is the language of the claim, is it not?

"A. Yes, it says so.

"Q. Is a hole through the side of the pin an axial opening?

"A. No.

"Q. It is not?

"A. A hole through the side of a pin is not an axial opening.

"Q. Then, according to your construction, there is no hole in this pin axially communicating with the oil?

"A. Axially. What do you mean?

"Q. Axially opening in the chamber.

"A. The hole in the pin communicates with the chamber.

"Q. Not an axial hole?

"A. Certainly that hole is axial.

"Q. That one coming up through the side?

"A. That is a hole.

"Q. I speak of the hole going through the side as a radial hole. Where is your axial hole opening directly into the chamber.

"A. Right here.

"Q. Is that an axial hole?

"A. That is an axial hole.

"Q. Does that open into the chamber?

"A. Yes.

"Q. Where does that open into the chamber?

"A. Here.

"Q. This hole here opens here. The axial hole opens through the raidial hole, does it?

"A. The axial hole enters into the chamber. It goes clear through the chamber.

"Q. Does it communicate with the chamber?

"A. Yes, it enters into the chamber and goes clear through and comes out the outside.

"Q. Does it communicate with the chamber?
"A. Yes, it does.
"Q. Through what, a radial hole?
"A. It is in the chamber.
"Q. Does it communicate with the chamber?
"A. Yes.
"Q. Through an axial hole?
"A. Through that hole.
"Q. What is that hole?
"A. That is a three-eighths inch hole.
"Q. What is it, radial hole or axial hole?
"A. Radial hole."

(*Transcript of Testimony, pages* 495-498.)

The Mallory block having separable sides is old in the prior art; there is no co-action between the separation of the sides and the manner of lubrication; you couldn't very well hold a block with one side; if you oil through one of the sides the fact that they are separable has no relation to lubrication, but if you oil through both of the sides, it does; the fact that the sides are separable helps you to take the block to pieces, which is a function entirely distinct and separate from oiling, and is old in the art; the shouldered pin is old in the art; the purpose of the shouldered pin is to hold the separable sides in their proper position to keep them from crowing; it is old in the prior art; the pin terminally threaded to engage the two sides is old in the prior art; the function of the threads and of the pin is to hold the block to-

gether, and there is no connection with the oiling or lubricating of the block; the matter of the pin having an axial opening and a radial hole from the opening bored axially in the pin to the bearing surface of the pin, to permit lubrication of the bearing, is old in the prior art; the function in the oiling device of a pin or block when the reservoir is enlarged is a question of degree and time, and except as to the question of degree is old in the art; the matter of a sheave journaled for rotation upon a pin and having oppositely disposed bosses is old in the art; I don't know as anyone ever attempted to have the bosses "fit closely but antifrictionally"; referring to Opsal patent No. 845,041, it looks as though they fitted closely; the oppositely disposed bosses of the Hammond patent No. 876,176 fit closely and frictionally into annular recesses; and if practical would be a better construction than the Gilchrist construction, it carries out the claim of the Gilchrist patent to a greater degree than the Gilchrist device; the words "anti-frictional" mean that two surfaces are close together not touching; one doesn't retard any motion of the other; so far as the dust-proof feature is concerned the Hammond device meets all the elements of the Gilchrist patent; there is nothing in the Gilchrist patent which shows the Gilchrist device has a closed top, and there is nothing in the Gilchrist patent which claims a regulation of the flow of oil by opening or closing of the top; the Gilchrist attachment of the top by means of lugs or ears is old in the art and performs no function in connection

with the oil reservoir; the function of the lugs is simply the matter of making a mechanical connection; the matter of having a top with lugs so as to properly register with lugs on the side is old in the art, and used for the purpose of supporting the blocks and properly spacing the sides, without any other purpose; I find in the exhibits introduced here, patents and devices, each of the elements which we find in the claims of the Gilchrist patent, as being old in the art, used for like purposes and performing like functions.

"Q. You also found that the Mallory side, with recesses in the side, was not adapted to fit closely to the oppositely disposed bosses of the sheave?

"A. I said I found it didn't fit quite as close as Mr. Gilchrist's.

"Q. It doesn't fit closely at all, does it? You don't claim it is a close fit between the outer surface of that boss and the recess?

"A. That depends upon what you call a close fit?

"Q. I asked you. You wouldn't call that a close fit, would you?

"A. In comparison with what kind of a fit?

"Q. No attempt to fit at all, is it?

"A. No attempt to fit frictionally, no.

"Q. No attempt at a fit, at all. It is just a means of supporting the recess from the side of the shell, is all, isn't it?

"A. Sure.

"Q. That is all it is intended for, is it not?

"A. The same intent, bringing this down in this shape. The same intent was in Mallory's mind as was in Gilchrist's mind when he brought it down.

"Q. I didn't ask you to pass on what was in their minds.

"A. Let me go further. Let me finish the answer. I have designed these block sides, and instead of putting this recess in that form and show that angle, and bring it close to the hubs, I brought the metal down, starting at a point up here, in a point out here beyond the rim of the sheave, and I have gone right straight to that center piece.

"Q. Would you consider you were within the claims of the Gilchrist patent?

"A. No.

"Q. When you did that?

"A. No.

"Q. Why not?

"A. I consider a different construction. There wasn't any attempt at a hub fit, at all. No relation between the size of the hub and the size of the annular recess.

"Q. And the purpose of that was to get a long bearing, was it not?

"A. The purpose of that was to get a long bearing.

"Q. Isn't that the only purpose stated in the Mallory block?

"A. I didn't have in mind the possibility of keeping the bearing cleaner; keeping the sand and other

matter out of it; that I know Mr. Gilchrist had in mind when he made his model.

"Q. You don't know what Mallory had in mind when he made this?

"A. I can judge by looking at the block.

"Q. Does that look as though intended for a dust proof block?

"A. Yes.

"Q. With this extending out at an angle of pretty near forty-five degrees, and coming to a sharp edge, with a hole open to all the dust?

"A. If not, why did he come up here at all? Makes a poor connection. Why didn't he start a pin bearing and go straight down?

"Q. Ask him about that, although it makes a neater block. Don't you think it looks better.

"A. I don't know as any neater, no.

"Q. Don't you think it more attractive to the eye of a logger?

"A. A logger don't look for attractive eyes. He looks for serviceable things.

"Q. Don't you try to design blocks to appeal to the eye of the logger, as well as for practical purposes?

"A. That never entered my head, to please the logger's eye. I tried to meet his requirements."

(*Transcript of Testimony, pages* 504-506.)

UPON RE-DIRECT EXAMINATION:

In answering the question on cross examination of the effect that if the outside chamber of the Morgan patent were welded it would contain the elements of the Gilchrist patent, I understood that I was answering the question as to claim 1 of Gilchrist and did not intend to state that the Morgan patent if so welded would answer claims 4 and 5 of the Gilchrist patent; I consider that the dust-proof feature of the Gilchrist block has been slightly impaired by the Mallory construction.

TESTIMONY OF F. B. MALLORY, recalled as a witness on behalf of the complainant in rebuttal:

Witness identifies the catalogue of 1912 and refers to a cross sectional view or cut of the Gilchrist block as shown on page 34 of said catalogue.

Mr. Gilchrist furnished me the copy from which that cut was made; I have not given Mr. Gilchrist any credit in this advertisement but have designated the block as "Diamond M Trip Block with oil reservoirs"; the Diamond M is the trade mark of the F. B. Mallory Company; the Gilchrist block is marked in this catalogue with my copyrighted trade mark but Mr. Gilchrist was familiar with that at the time.

Witness identifies his catalogue in 1913 and the same was introduced in evidence and marked "Complainant's Exhibit 34."

This catalogue shows no self-oiling blocks of the type in suit; my current catalogue shows some twenty-five varieties of self-oiling blocks.

Witness identifies defendant's advertisement in the Timberman of January, 1916, and the same was introduced in evidence and marked "Complainant's Exhibit 35."

Witness identifies page 22 of the Timberman of March, 1916, as defendant's advertisement and the same was introduced in evidence and marked "Complainant's Exhibit 36."

Witness identifies page 26 of the Timberman of May, 1916, as defendant's advertisement and the same was introduced in evidence and marked "Complainant's Exhibit 37."

Witness identifies page 28 of the Timberman of November, 1917, as defendant's advertisement and the same was introduced in evidence and marked "Complainant's Exhibit 38."

Witness identifies page 28 of the Timberman of June, 1919, as defendant's advertisement and the same was introduced in evidence and marked "Complainant's Exhibit 39."

UPON CROSS EXAMINATION:

Mr. Gilchrist was furnished a copy of my catalogue No. 5, showing the cut of his block and the shape it was in; he was notified before the catalogue was issued and the cut requested; he made no objection to the advertisement.

The blocks shown in our advertisements have a distinctive design of their own, in shape, form, style of sides and pin arrangement; I was the first man to get out blocks of this distinctive design; the first sky-line and high-lead blocks of this design with auto-lubricating sides were put out by the defendant in March, 1914; Gilchrist had no blocks of that character on the market at that time for high-lead or sky-line purposes; the first I remember of seeing Gilchrist blocks of that kind was in an advertisement of the Timberman in February, 1916.

MR. M'CARTHY: We have a right to meet the new matter. Here is what we would like to do; a man with experience in logging to meet this defense brought out; probably put Mr. Mallory on for a short time. And as a matter of showing whether or not our testimony is correct, I would like Court and Counsel to go down and look over the stock and catalogues, the exhibits of blocks as now sold on the market by the defendant, as verification of our testimony in this respect. Mr. Mallory, the defendant here, is probably the biggest logging supply man on the Pacific Coast, and his stock certainly is indication of which the trade is calling for at the present time.

MR. CARY: Built up on our blocks.

MR. M'CARTHY: It is what we want the Court to see. The only purpose of the oil reservoir is the high lead block. Many manufacturers don't manufacture a block with oil reservoir except for a high lead block.

TESTIMONY OF CHARLES S. COREY, recalled as a witness on behalf of the complainant in rebuttal:

I took over the active management of the Gilchrist plant, the Willapa Harbor Iron Works, on March 2, 1920, have been in active management a little more than three months; think proportionate output of the plant is about twenty self-oiling blocks to one grease cup block; the last three months have put out one hundred and twenty self-oiling blocks and five grease cup blocks, we have more orders for self-oiling blocks than we can fill; we advertise both the self-oiling block and the grease cup block, and are able to furnish what the trade demands.

Complainant's catalogue introduced in evidence and marked "Complainant's Exhibit 40."

Complainant's Exhibit 40 was issued and published in 1914 and was the catalogue of the Complainant next prior to Defendant's Exhibit "3-W."

UPON CROSS EXAMINATION:

We make a special feature of the oil reservoir blocks.

File wrapper of Gilchrist Patent No. 977,613 introduced in evidence and marked "Complainant's Exhibit 41."

COMPLAINANT RESTS.

TESTIMONY OF F. B. MALLORY, recalled as a witness on behalf of the defendant in sur-rebuttal:

Catalogue of the defendant introduced in evidence and marked "Defendant's Exhibit 3-Z." This catalogue was issued in 1911 and shows on pages 24 and 25 a guard with a cross bar between the shackle and the sheave; Complainant's Exhibit 4 is our most recent catalogue, in which we show one hundred and forty-seven numbers of logging blocks, thirty-two of which have oil reservoirs in the sides and the balance have oil reservoirs in the pin or with straight or elbow oil cups on the ends of the pin; seven logging blocks are shown with reservoir side and guard or cross head; nine blocks are shown with the cup or elbow design with cross heads; we have never considered making a moving block, a butt chain block or a yarding block with an oil chambered side, all of our blocks of this character are made with an integral oil chamber in the pin; the stock which we carry corresponds with our catalogue; we carry a full line of stock to keep in touch with logging demands, covering the entire Coast from British Columbia to Arizona with some export business, and some business in eastern states; the plate steel or sheet steel sides of blocks are as serviceable, if not more so, than the cast steel sides; we are making, and have always made, blocks with sheet steel sides; we have the skyline equipment, the heaviest equipment that is made, and it is made of sheet steel sides with reinforced

strips riveted on the outside; the overhead carriages are either lubricated with elbow oil cups screwing on the end of the pin or by a reservoir that is attached to the end of the pin and held in place by rivets or set screws as illustrated in Complainant's Exhibit 4, at pages 79 to 89, inclusive; the purpose of using cast sides is because they are more readily adapted to design and distinctiveness than the forging would be; castings are more uncertain and they are not to be as freely depended upon as forging or sheet steel sides because of the blow holes or sponginess that occurs.

Witness identifies Diamond M cast side as a side in which defects have appeared and the same was introduced in evidence and marked "Defendant's Exhibit 4-A" The defects in Exhibit 4-A were that the metal didn't run about in one place in the oil reservoir, and caused a leakage, and in the other place the support of the core was imperfect, and there is a leak around that; these defects would not have occurred in a block of boiler plate or sheet metal, because a joint could be either riveted with a gasket that would make it tight, or with acetylene to weld to the side itself, and thereby preclude any leakage of any kind; the boiler plate or forged steel plate is free from blow holes, because it is rolled and re-rolled from a cast ingot, until the flaws and defects practically all adhere or else disappear.

Witness identifies Diamond M block side and the same was introduced in evidence and marked "Defendant's Exhibit 4-B."

This side shows a defect in that after the hole was drilled in the lugs it opened a fissure that had not been found before, making it practically useless so that the side was discarded; blow holes developed in it and caused leakage after the blocks had been sent out by the trade. I never knew of a guard of the type of Complainant's Exhibit 33 ever being placed on the market, marked with the Gilchrist patent; I never placed guards on the market, marked with the Gilchrist patent, nor gave my consent thereto to anyone else; I never knew of anyone makinga guard of the type covered by my designed patent prior to the making of one by myself and applying for a designed patent thereon.

UPON CROSS EXAMINATION:

I also make a guard with a finger attached to the shackle; obtained a patent for that form of guard upon application of December 16, 1911; we are still using both the H form and the finger form of guard, probably more of the finger form of guard than the H form of guard.

"Q. Now with reference to the utility of this reservoir type of block, you are willing to admit that that type of block is a commercial success?

"A. Yes.

"Q. And you are willing to admit that for high-lead purposes the oil reservoir block has displaced the grease cup block?

"A. Oil reservoir block has been displaced—is more practical for high-lead purposes than the grease cup block or oil cup block.

"Q. And for high-lead purposes you are willing to admit, has displaced the grease cup block?

"A. But could be made with either forged or cast steel sides shown here.

"Q. Answer the question. You are willing to admit the type of block, with reservoir in the side here, has displaced the grease cup block and other types of block, with reference to the piling function, for high-lead work?

"A. We never used the blocks for high lead—

"Q. Answer the question, yes or no.

"A. Couldn't be any displacement because not used before.

"Q. Then there isn't any other type of block used for high-lead work?

"A. No.

"Q. Except—

"A. The oil reservoir block.

"Q. (Continued)—The oil reservoir block?

"A. Correct.

"Q. And you are also willing to admit that the high-lead system of logging is an advanced step in the logging industry?

"A. Yes, sir.

"Q. And that it has come to stay?

"A. Yes, sir.

"Q. And makes logging more economical?

"A. Yes, sir.

"Q. Get out more logs with the high-lead system?

"A. Yes, sir.

"Q. For the same outlay of expenditure—same outlay of expense?

"A. No, I won't say that; it costs more money to operate a high-lead, and equipment for high-lead is more expensive than it is for ground work. Be a very great deal of expense setting the camp and rigging the tree; very much more expensive.

"Q. But the proportionate increased production more than over-balances that?

"A. All depends on the condition of the ground, the size of the timber, and the size of the donkey engine.

"Q. You are going back on your testimony. You have already admitted that the high-lead system is a step in advance in the logging industry.

"A. I said so.

"Q. And has come to stay?

"A. Yes.

"Q. And no other form of block is used in that system of logging except the type of block in suit here?

"A. With oil reservoir side.

(*Transcript of Testimony, pages* 526-528.)

The largest producers of the logging blocks on the Pacific Coast were the Washington Iron Works in Seattle, Stewart Brothers, Willamette Iron & Steel Works, Smith & Watson Iron Works, and the F. B.

Mallory Company of Portland; we are probably the largest producers.

MR. McCARTHY: If the Court please, I don't think that is competent for the attorney to introduce catalogues of other firms here, not connected with this case. Especially on cross-examination of the defendant.

COURT: What do you claim for the catalogues of other firms?

MR. PECK: To show the way in which they are pressing this reservoir form of block.

MR. McCARTHY: I don't see that that has anything to do with the case.

MR. PECK: To show the utility of it. Whether it is used; the commercial success of it.

COURT: I don't understand there is any question about the utility. Used substantially exclusively for high-lead work.

MR. PECK: And the commercial success of it.

MR. McCARTHY: We are willing to admit the commercial success.

MR. PECK: On that theory of the case, for whatever it may be worth, we would like to offer the catalogue of the Washington Iron Works and the catalogue of Stewart Brothers, together with the catalogues of the Mallory Company.

COURT: File them with the reporter, if of any service.

(*Marked Complainant's Exhibits* 42 *and* 43.)

MR. PECK: That is all.

RE-DIRECT EXAMINATION:

Question by Mr. McCarthy:

"Q. One question I neglected to ask Mr. Mallory. Who was it, Mr. Mallory, that promoted the adoption

of the high-lead or skyline system of logging in the Pacific Northwest?

MR. PECK: Incompetent, irrelevant and immaterial. Not a material question in this case.

COURT: I don't know what you are claiming for that?

MR. McCARTHY: This is what I claim for it: That the defendant himself was the one who promoted and urged upon the camps the introduction of the skyline system of logging, and made his own logging blocks adapted thereto at least two years before other manufacturers followed up with blocks for that system of logging.

COURT: Before the Gilchrist patent?

MR. McCARTHY: Not before the Gilchrist patent, but before blocks were made by Gilchrist for that purpose.

COURT: That wouldn't affect the validity of the patent one way or the other.

MR. McCARTHY: No, I don't think it would. Just shows something on the question of good faith, as to whether one was trying to get the other's patent away from him. That seems to be what this case has reduced itself to.

COURT: That is not the issue in the case. The issue in this case, as I understand it, is whether Gilchrist's device was patentable, and if so, whether the defendant infringed. I don't think it makes any difference in the case who promoted the work.

(*Transcript of Testimony, pages* 529-531.)

TESTIMONY OF E. L. TAYLOR, recalled as a witness on behalf of the defendant in sur-rebuttal:

United States Letters Patent No. 349,691, issued to H. Butters, dated September 28, 1886, introduced in evidence and marked "Defendant's Exhibit 4-C."

Witness identifies a block side as one constructed by himself, marked "Taylor, Patent Applied For," and the same was introduced in evidence and marked "Defendant's Exhibit 4-D."

I did not receive a patent on that style of block but made application for it in 1911.

Defense Rests.

United States Letters Patent No. 1,145,110, issued to B. C. Ball, of date July 6, 1915, introduced in evidence and marked "Complainant's Exhibit 44."

Complainant Rests.

In accordance with the stipulation of counsel in open court at the time of the admission of the foregoing patent, defendant thereafter introduced in evidence the file wrapper and contents of Patent No. 1,145,110, issued to B. C. Ball July 6, 1915, and the same was marked "Defendant's Exhibit 3-E," and also introduced in evidence the file wrapper and contents of Complainant's Patent No. 1,063,528, issued to John E. Gilchrist June 3, 1913, and the same was marked "Defendant's Exhibit 3-F."

Defense Rests.

Case Argued and Submitted.

CERTIFICATE OF SETTLEMENT AND ALLOWANCE.

The foregoing statement of evidence, in conformity with Equity Rule No. 75, is hereby allowed, settled, and certified to be a true and correct statement of all the evidence introduced and received on the trial of said cause.

Dated at Portland, Oregon, this 14th day of September, 1921.

R. S. BEAN, *Judge.*

And afterwards, on the twenty-second day of September, 1921, there was filed in said Court the following

ORDER.

Upon motion of the complainant and appellant, and for good cause shown, the complainant and appellant is given an extension of time and including the fifteenth day of October, 1921, within which to complete his proceedings on appeal, and to file the record on appeal and docket this cause in the United States Circuit Court of Appeals for the Ninth Circuit.

Dated at Portland, Oregon, this 22d day of September, 1921.

R. S. BEAN, *Judge.*

Due, timely and legal service of the foregoing order admitted at Portland, Oregon, this 22d day of September, 1921.

LOYAL H. MCCARTHY,
Attorney for Defendant and Appellee.

And afterwards, on the 11th day of October, 1921, the attorneys for the parties entered into the following

STIPULATION AS TO RECORD.

The attorneys for complainant, having prepared and compared with the original record the within printed transcript,

Now, therefore, it is hereby stipulated and agreed by and between the parties to the within proceedings for an appeal, by and through their respective attorneys, that the within printed record tendered to the Clerk of the United States District Court for the District of Oregon for his certificate, is a true transcript of the record of the within cause and that the Clerk of the said Court shall certify to said printed transcript without comparison thereof with the original record.

GRIFFITH, LEITER & ALLEN,
Attorneys for Complainant and Appellant.

LOYAL H. MCCARTHY,
Attorney for Defendant and Appellee.

And afterwards, on the 11th day of October, 1921, the Clerk of the United States District Court for the District of Oregon executed the following

CERTIFICATE.

The attorneys for the respective parties to the within proceedings, having stipulated that the within printed transcript of record, as prepared, compared and tendered to me for certification by the attorneys for the complainant and appellant, is a true transcript of the record in this cause, and that I shall certify the same without comparison,

Now, therefore, in accordance with the said stipulation, I, G. H. Marsh, Clerk of the District Court of the United States for the District of Oregon, do hereby certify that the foregoing transcript of record upon appeal in the case in which John E. Gilchrist is complainant and appellant, and F. B. Mallory Company, a corporation, is defendant and appellee, is a full, true and correct transcript of the record and proceedings had in said Court in said cause, as the same appear of record and on file at my office and in my custody, the same having been compared by attorneys for appellant.

And I further certify that the fee for the certifying of the within transcript, to wit, the sum of 50 cents, has been paid by the appellant.

In testimony whereof, I have hereunto set my hand and affixed the seal of said Court, at Portland, in said District, this 4th day of October, 1921.

G. H. Marsh, *Clerk.*